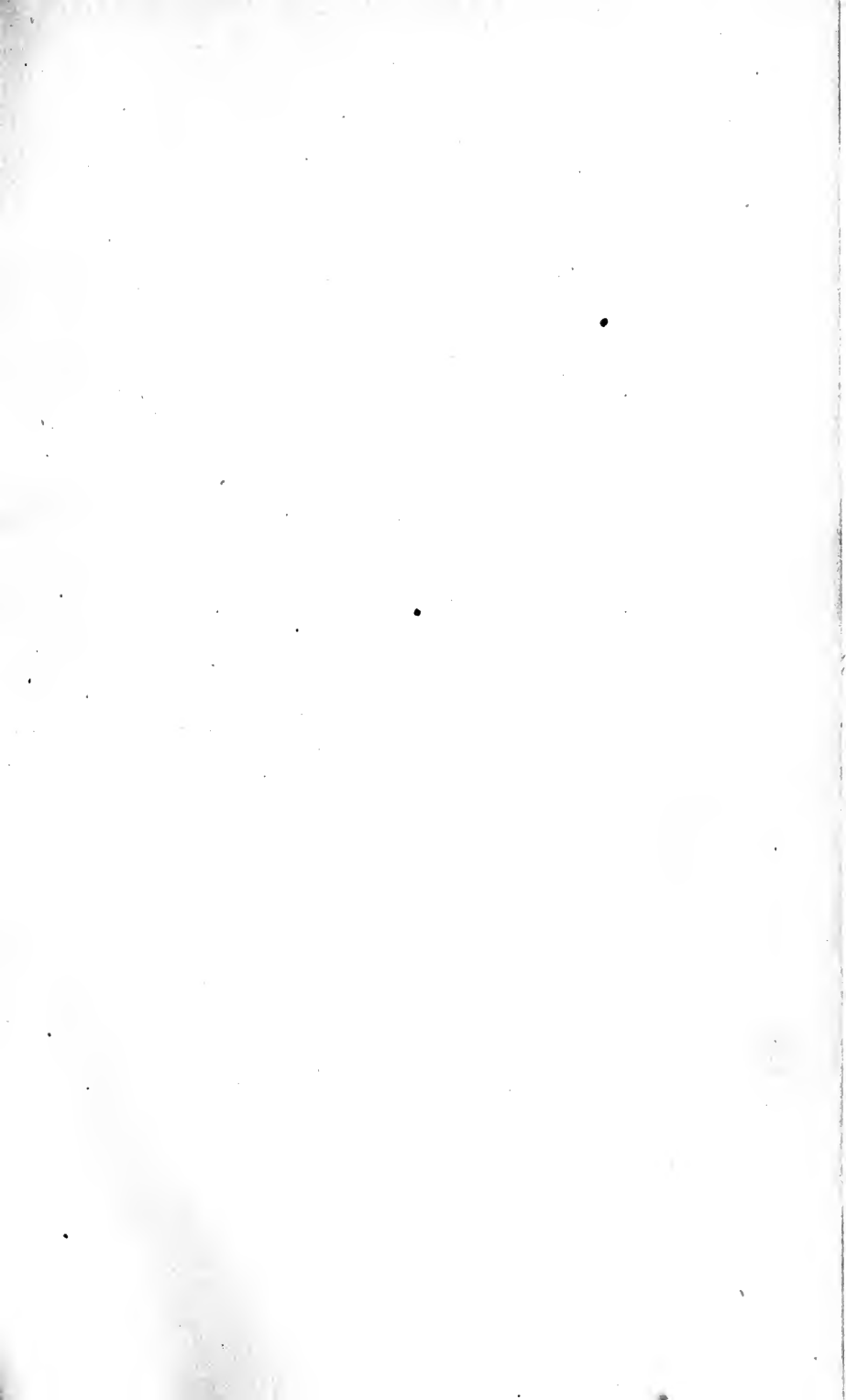
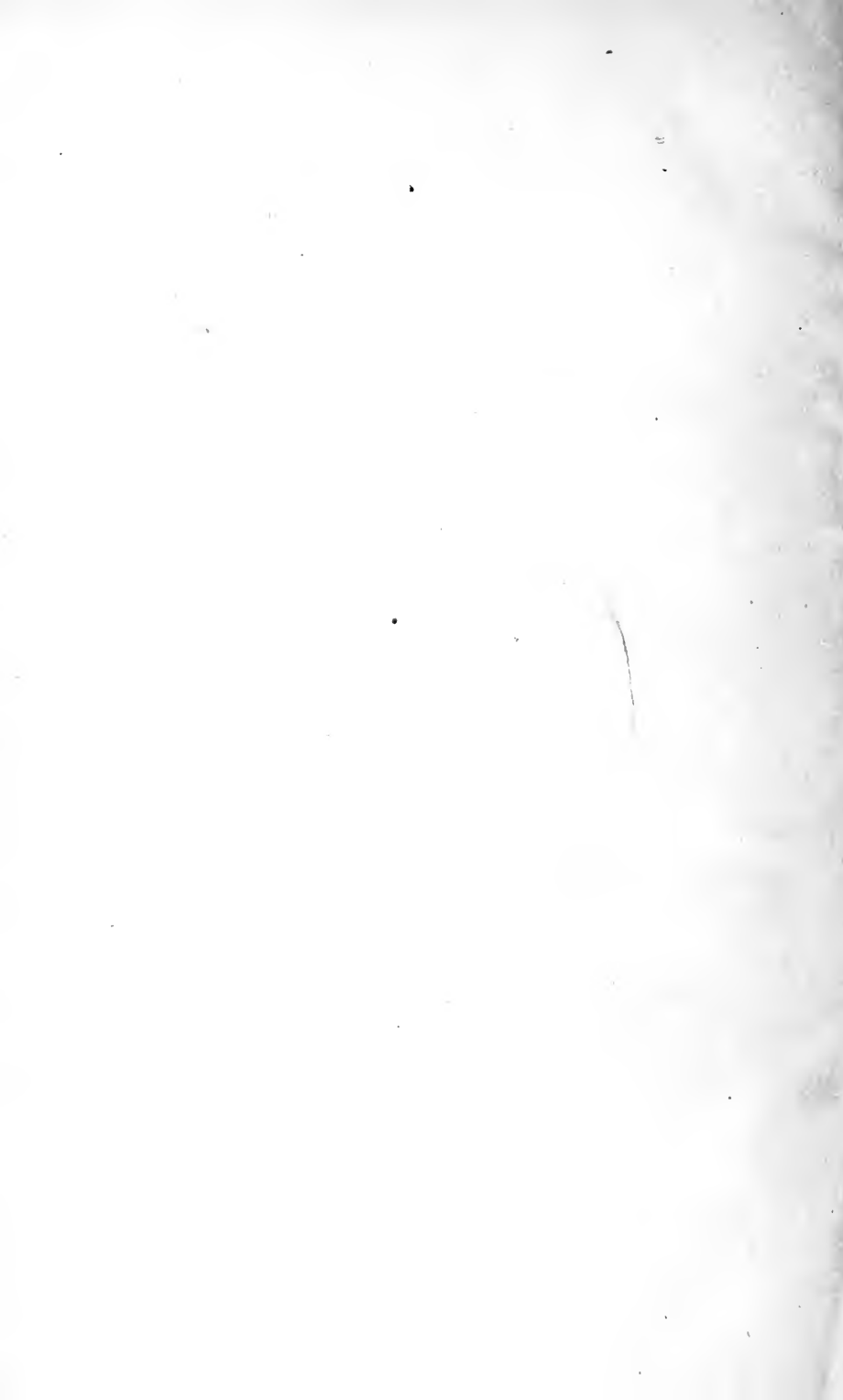


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AND
MENTAL PATHOLOGY.

EDITED BY
FORBES WINSLOW, M.D., D.C.L. OXON.

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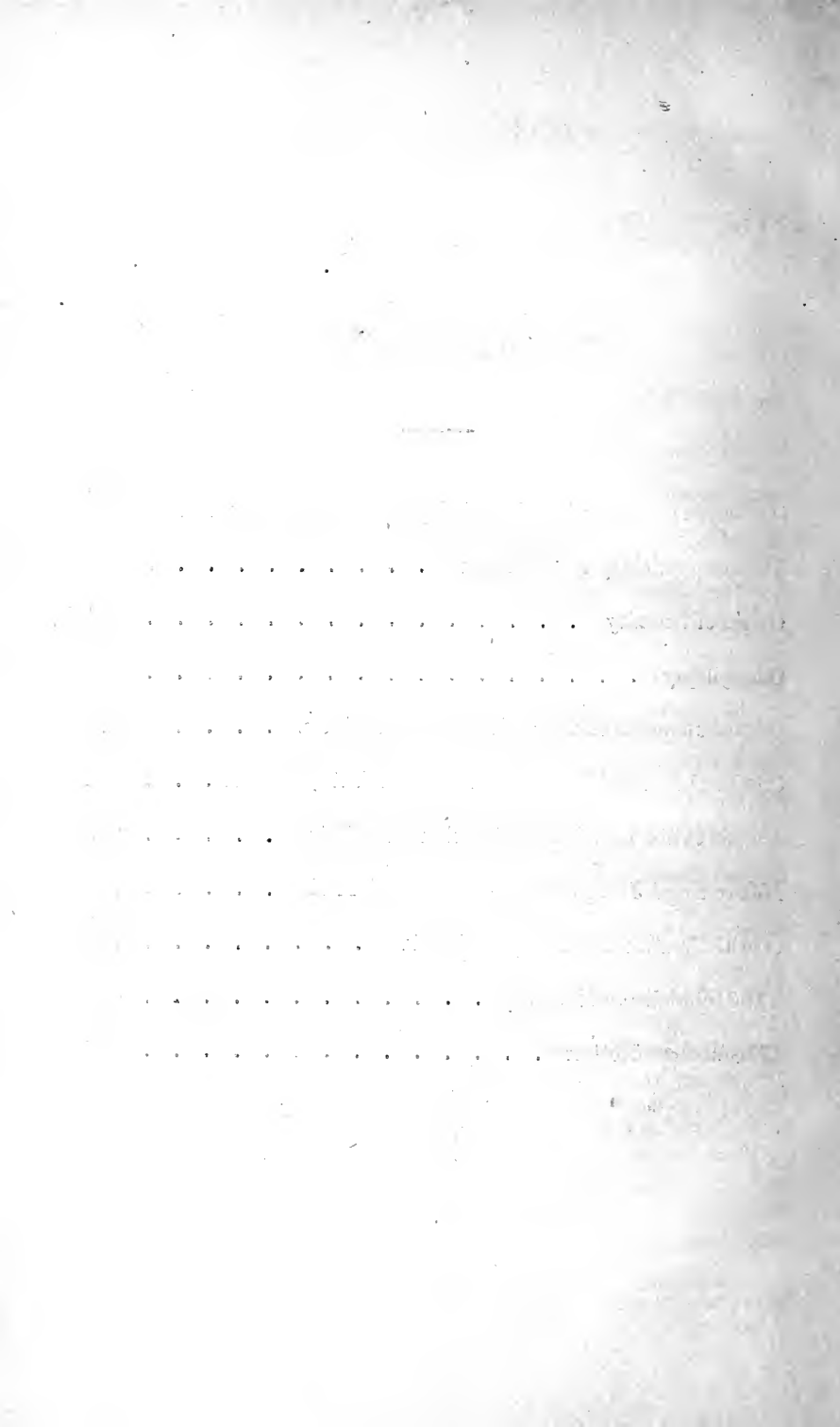
CONTENTS.

	PAGE
British Asylums for the Insane	1
On Seclusion in the Treatment of the Insane	30
On Epilepsy	35
Psychology of Descartes	52
The Asylum Journal	69
The Reformation in the Treatment of the Insane	72
The Histology of the Blood in the Insane	78
The Lettsomian Lectures, No. IV. On Medico-legal Evidence in Cases of Insanity. By Forbes Winslow, M.D., D.C.L. . .	94
On Pledges exacted from the Insane	134
On the Causes and Morbid Anatomy of Mental Diseases . . .	139
On the Connexion between Morbid Physical and Religious Phenomena, No. II.	148
American Institutions for the Insane	152
Cerebral Pathology	160
Heigham Hall Lunatic Asylum, Norwich	168
Hospitals for the Intemperate	170
Suggestions for a New Psychological Terminology	173
To the Editor of the Journal of Psychological Medicine . . .	173

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CONTENTS.

	PAGE
Oinomania; or, the Mental Pathology of Intemperance . . .	175
The Responsibility of the Insane	207
Origin of Insanity	233
On Epilepsy	253
Critical Remarks on the "Plea of Insanity," &c.	266
On the Causes and Morbid Anatomy of Mental Diseases . . .	282
A Visit to the American State School for Idiots	292
Medico-Legal Jurisprudence.—Important Trial	296
On the Treatment of Puerperal Mania	309
The Materialism of Insanity	313
Miscellaneous Notices	315



CONTENTS.

	PAGE
The Brain in Relation to the Mind	317
On the Condition of Lunatics and Idiots in Ireland	328
Autobiography of the Insane	338
Psychology of Berkeley	354
American Psychological Literature	375
On the Uses and Influence of Mental Philosophy	379
Does any Analogy exist between Insanity and Demoni- acal Possession ?	391
An Analysis of Guislain's work on Insanity	401
On the Connexion Between Morbid Physical and Religious Phenomena	415
Critical Remarks on the Plea of Insanity, &c.	421
American Institutions for the Insane	433
The Will of Dyce Sombre	446

THE CASE OF BURANELLI; a full report from the notes of the
short-hand writer; with medico-legal remarks by DR.
WINSLOW.



CONTENTS.

	PAGE
State of Lunatic Asylums and the Insane of Ireland	459
Remarks on the Religious Persuasion, Degree of Education, and Employments of Persons affected with Insanity	472
On the Connexion between Morbid Physical and Religious Phe- nomena	478
Insanity and Demoniactal Possession	483
Suggestions in Reference to the Study of the Philosophy of the Human Mind	493
On the Mind	498
William Tuke, the Founder of the York Retreat	507
Researches into the Functions of the Brain	512
On the Policy of maintaining the Limits at present imposed by Law on the Criminal Responsibility of the Insane	541
Claim of Priority in the Reformation of the Treatment of the Insane	556
Retrospect of the Autopsies performed in the Vienna Lunatic Asylum of the Patients who died in 1853	558
American Institutions for the Insane	562
Cerebral Pathology based upon the Examination of 411 Cases. Specific Gravity of the Brain in Cases of Insanity	573
Private Lunatic Asylums in Ireland	580
Religious Consolation to the Insane	583
On the Causes and Treatment of Insanity	585
Opening of an Institution for the Treatment of Idiocy in Edinburgh	587
Influence of Ether and Chloroform on the Mind	589
Case of a Gentleman who was born Deaf and Dumb, and sub- sequently became Insane	591

On the 1st of January, 1856, will be published,

Nº I. OF A NEW SERIES

OF THE

PSYCHOLOGICAL JOURNAL.

EDITED BY FORBES WINSLOW, M.D., D.C.L. OXON.

THE first number of the "Psychological Journal" appeared in January, 1848. It has now reached its 32nd number, and 8th volume. It is deemed advisable, for many reasons, to commence in January, 1856, a NEW SERIES OF THE JOURNAL, with the view of enabling the Editor to introduce into this Quarterly Publication some important alterations and improvements. The "Psychological Journal" for the future will be divided into distinct and special departments, embracing:

1. ORIGINAL COMMUNICATIONS ON THE SUBJECT OF INSANITY AND MEDICAL PSYCHOLOGY.
2. PURE PSYCHOLOGY, LOGIC, AND MEDICAL METAPHYSICS.
3. COPIOUS ANALYTICAL NOTICES OF ALL BRITISH AND FOREIGN WORKS ON PSYCHOLOGY AND INSANITY.
4. CEREBRAL PHYSIOLOGY AND PATHOLOGY.
5. JUDICIAL PSYCHOLOGY.
6. FULL REPORTS OF ALL LUNACY TRIALS.
7. PSYCHOLOGICAL INTELLIGENCE.

No labour or expense will be spared by the Editor and his able contributors to make the New Series of the journal complete in all its sectional departments. With this object, a correspondence has been opened with the leading psychological physicians of FRANCE, GERMANY, and AMERICA; and offers of assistance have already been liberally made to the Editor by the leading men in each country, who have undertaken to supply him with all the recent works, pamphlets, public documents, and intelligence having reference to the subject of Psychology and the treatment of the insane. Without neglecting the investigation of questions connected with Medical-Psychology, Logic, and Metaphysics, it will be the principal object of the Editor to give the New Series of his Journal a decided practical character by the publication of a course of articles on the medical, moral, and judicial treatment of the insane, having particular reference to the organization and management of lunatic asylums, and the cure of insanity by therapeutic remedial agents. It will be the aim of the Editor to cultivate and invite a correspondence with all connected with the management of the insane, as well as with those in and out of the profession who have paid special attention to the study of Psychological Science and Mental Philosophy. Information of a practical bearing will be solicited from all quarters, with the object of making this Quarterly Journal the leading and recognised medium of psychological communication between thinking and experienced men of all nations. Literary assistance has been freely promised by several distinguished Jurists interested in the subject of insanity in its medico-legal aspects; and many of the clergy, officially connected as chaplains with our Public Asylums and Hospitals, will also contribute valuable matter to our pages. From these varied sources of information, the Editor hopes to make each literary department of the "Psychological Journal" complete in all its important and essential features. A very large capital has already been expended in the establishment of this Journal, THE FIRST OF THE KIND PUBLISHED IN THIS COUNTRY. Until the appearance of this periodical, there existed in Great Britain no Journal or publication devoted to the investigation of psychological subjects, and those engaged in the responsible and anxious duty of treating the insane possessed no special organ of communication. The "Psychological Journal" supplied this desideratum. The Editor trusts that these facts will not be overlooked or disregarded by the public and the profession, and that they will show, by liberally supporting the New Series, their kind appreciation of our labours to excite an interest in, and to extend a knowledge of, an important and hitherto neglected department of Medical Science and Philosophy.

THE JOURNAL
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

JANUARY 1, 1855.

ART. I.—BRITISH ASYLUMS FOR THE INSANE.

WE propose inaugurating our new volume by placing before our readers an analysis of the most recent reports of the British County Asylums. These annual records contain a vast body of useful general and statistical information in reference to the condition of the pauper portion of our insane population. These reports are not easy of access to many of our foreign subscribers, and it becomes, therefore, important that we should annually publish a fair *résumé* of their contents. The official documents now under review are evidently drawn up with great care. The tabular statements embodied in the reports must have entailed upon the medical officers much thought and laborious work. Without further preface, we now proceed to an analysis of the "Ninth Report of the Hanwell County Lunatic Asylum for 1854:"—

"The number of patients admitted during the year was 126, of whom 64 were males, and 62 females. The number discharged cured was 43, of whom 17 were males, and 26 females. Three males also left the Asylum improved. The number of deaths was 68, of whom 45 were males, and 23 females. The rate of mortality, though somewhat higher than last year, is not above the average."

Dr. Begley says—

"The number of patients in the male division of the asylum at the commencement of the year was 411; 64 have been admitted since,

making together 475; 17 have been discharged cured, 3 as improved, and 45 have died, leaving 410 now under care.

"The patients admitted during the year were generally in so chronic a stage of their disorder, or the malady was so much complicated with general paralysis or epilepsy, diseases which usually render insanity incurable, that hope could not be entertained of the recovery of many of them. Some of those, however, who were received during the early stage of the disease, and who were not affected with either of the complications referred to, have left the asylum well; others of them are progressing favourably, and are likely to be discharged cured in the ensuing spring.

"In 38 of the cases admitted the disease assumed the form of mania, and in 9 that of melancholia. Imbecility was the type of the disorder in 15 cases, and dementia was manifested in 2. Mania was associated in 6 cases with general paralysis, and in 6 others with epilepsy. There was a double combination of general paralysis and epilepsy in 1 case of mania. Melancholia was found in union with general paralysis in 1 case. Imbecility was combined with that affection in 8 cases, and with epilepsy in 1; in 1 other case of imbecility there was a combination of both paralysis and epilepsy. The 2 cases of dementia were complicated with general paralysis.

"A tendency to suicide was united with 1 case of mania, and with melancholia in 7 cases; 1 of the suicidal cases of melancholia was affected with general paralysis."

Dr. Begley refers to the cases of three patients who were discharged "cured," after being 11, 4, and 6 years inmates of the asylum. He justly observes, that "recoveries like these 3, after so long a residence in the Institution, are occasionally met with in every asylum, and tend to show that hope is not to be abandoned in any case, however unpromising or protracted."

The deaths were, as usual, "caused by general paralysis, apoplexy, epilepsy, and general debility; some others resulted from dropsy, diseases of the heart and lungs, stomach and bladder."

Mr. Denne, the medical superintendent of the female department, has made but a short report. He says—

"On the first of January, 1853, there were 552 female patients in the asylum.

"The average number resident during the year has been 557.

"Sixty-three patients have been admitted; about half of whom, from either age, infirmity, or advanced stage of disease, must be added to the list of incurables.

"Twenty-three patients have died; of whom 2 were upwards of 90 years of age, 5 above 80, 2 above 70, 8 above 60, and 6 between 20 and 50, the average of the whole number being $61\frac{1}{2}$ years."

The Chaplain's report is satisfactory. The majority of the patients manifest an eagerness to be present at divine service. At the last

celebration of the holy communion in the asylum, 55 patients attended! The following case forcibly illustrates the importance of bringing the insane within the soothing influences of religion:—

“On entering the wards after the evening service, a patient came to meet me, and said, ‘I thank you, sir, very much for your sermon to-day, it has taken a load, as it were, from my mind, for I feared I should not be able to resist the dreadful thoughts I have lately had; but now I believe, through God’s help, that I shall be able to get rid of them.’ On my remarking, ‘But you were not at chapel, N.,’ he replied, ‘No, I was too ill to sit so long, but I stood outside the door and listened.’ Surely in this we have an example of the Word being blessed, ‘to strengthen the weak hands and confirm the feeble knees.’”

The Hanwell committee have thought proper to publish a report from the Matron of the asylum. Surely this is unnecessary? It places her in a false position, and is, we think, derogatory to the dignity, and detrimental to the usefulness of the medical staff. There is nothing in her report that entitles it to this honour. It is entirely devoid of interest: the facts she records are of no practical importance or value. In making these observations, we repudiate all intention of depreciating the talents, activity, industry, and humanity of Mrs. Macfie; but we would advise her for the future to leave to the medical officers the duty of doing the literary work of the asylum. She must have much to occupy her time in discharging faithfully the onerous duties that specially devolve upon one holding her responsible post. In writing accounts of cases in the asylum for publication in the annual report she is evidently out of her element. The committee of Hanwell Asylum will do well to omit, for the future, this kind of addenda.

The report contains several valuable tables well worthy of attention.

The “Third Annual Report of the County Asylum at Colney Hatch” next merits attention. It appears that—

“During the past year, 392 patients have been admitted,—namely, 254 males and 138 females. The deaths during the spring were more than the average, on the male side; but during the year the number has not been more than might have been expected, considering the state in which many are sent to the asylum.

“On the female side, the mortality has not been greater than in former years.

“The total number of deaths is 208,—namely, 135 males and 73 females.

“The discharges of patients recovered during the year have been—100 males and 42 females—a number which, if not equal to our benevolent desires, is beyond what might have been expected, and exceeds that of last year by 10 cases.”

Mr. Tyerman, head of the male department, records the following statistics:—

There remained in the male department, 31st Dec., 1852	514
There have been admitted since	254
Total males under care during the year	768
There have been discharged—	
Recovered	100
Relieved	23
Unrelieved	6
Died	134
Total discharged and dead	263
Remaining under care Dec. 31st, 1853	505
Daily average number	509

In speaking of the epileptic cases, Mr. Tyerman says that “10,000 epileptic fits occur annually among the male patients alone.”

It appears that—

“*Post mortem* examinations have been instituted in 104 cases, the results proving very generally the long previous existence of organic affections; pulmonary disease, tubercle, &c., was associated in 89 instances, heart disease in 51, and kidney disease in 42. Abnormal conformation of the brain has been occasionally observed; *e.g.* want of symmetry between the hemispheres and central portions, and in rare instances the posterior conua of the lateral ventricles were not developed.”

Mr. Marshall, medical superintendent of the female department of the asylum, says,—

“In consequence of the house being nearly full at the end of the year 1852, the admissions of patients have not been quite so numerous, amounting to 138, whilst during the year, 42 have been discharged as recovered, 16 relieved, and 8 not improved, have been removed to other asylums, and 73 have died, leaving 728 patients under treatment in the asylum on December 31, 1853, vacancies for 8 persons only remaining in the various wards of this department of your asylum.”

This gentleman appends to his report several interesting tabular statements. The account of the *post mortem* examinations appear to be clearly and ably drawn up, and do credit to the medical officers of this national establishment. From Colney Hatch Asylum we proceed to another great public institution, the annual report of which is now before us. We allude to Bethlem Hospital. We have been much pleased with Dr. Hood's account of the state of this asylum. His report is drawn up with ability, and embodies many facts of deep interest to the psychological physician. First, as to the statistics of Bethlem, Dr. Hood says,—

“On the 1st of January, 1853, there were 356 patients (including those out on leave) in the hospital, of whom 194 were males, and 162 females; and during the year 242 patients were admitted—105 males,

and 137 females; so that since the last annual report 598 patients have been under medical treatment and moral surveillance.

“The admissions were as follows:—

	M.	F.	Total.
“Curable	72	128	200
Incurable	1	3	4
Criminal	32	6	38
	<hr/> 105	<hr/> 137	<hr/> 242

“The number of admissions in this, and in all other public institutions, is subject to remarkable fluctuations: thus, in the year 1849 there were received into this hospital 344 patients; the next year the number rose to 374, and in the following year, viz. 1851, the admissions fell to 306.

“It is, therefore, neither surprising nor disparaging to find the number of admissions last year was less than during preceding years, which was reasonably accounted for by my predecessors, who observed, in their report addressed to you in 1851, that ‘this diminution of admissions may be ascribed to the numerous county asylums which have been erected in different parts of the kingdom, and which must necessarily diminish in a material degree the applications for admission into this and similar institutions.’ We have also to consider that in the metropolitan district alone competition has induced the proprietors of some private asylums to adopt such a reduction of terms as render many of these establishments available to the middle classes of society—persons on the verge of poverty, who would otherwise require charitable assistance. Among the admissions you will observe 38 criminal lunatics—32 males and 6 females—being an increase of 10 upon the number admitted in 1852, and of as many as 24 upon the number admitted in 1851.

“The discharges and removals of patients during the year amounted to 212, of whom 82 were males, and 130 females; of these numbers it is satisfactory to state that 121 were dismissed cured. The details are as follows:—

	M.	F.	Total.
“Cured	45	76	121
Uncured	35	48	83
Removed at request of friends	2	6	8
	<hr/> 82	<hr/> 130	<hr/> 212

“The peculiar constitution of this hospital, which by its regulations restricts the period of a patient’s residence on the curable establishment to one year, with a discretionary extension to three or six months—which was wisely devised with the view of making it a strictly curative institution—may explain the reason of so many patients being discharged *uncured*. The majority of them were in fact still under medical treatment, though with little if any hope of permanent amendment: it being well known that the chances of recovery are materially diminished after the first year; and the majority of cures here reported will be found to have taken place within the first three months after admission.

"The deaths which took place during the year, it is highly satisfactory to state, were not so numerous as I had reason to anticipate in my last report."

When referring to the adoption of the "Non-restraint System," Dr. Hood gives some interesting details of the barbarous mode of treatment pursued towards the insane during the "dark ages." We are glad to perceive that Dr. Hood is directing his attention to moral treatment, and that he is disposed to carry out in a liberal and enlightened spirit the curative principle acted upon with such great success in the majority of the best first-class private asylums in this country. He justly observes,—

"In the moral management of the insane we cannot attach too much importance to those occupations and recreations which tend to divert the mind from its delusions, and which rouse and invigorate the healthy exercise of its reflecting faculties. Speaking generally, we find lunatics of every class, unless urged to the contrary, disposed to be indolent; some few indeed may be mischievously restless: but the majority succumb under their morbid feelings, and are indisposed to exert themselves with any degree of steadiness.

"There can be no doubt that every description of occupation has a curative tendency, and it is desirable that such patients should receive every possible encouragement. Even recreation, whatever be the kind of amusement, is only another term for mental employment, and judiciously promoted, cheers the mind, and excites a healthy tone of feeling. Hence some of the patients during the year were permitted to walk out, under the care of nurses and proper attendants, which was esteemed a great indulgence, and had perceptibly a good effect. Four of the male patients, who were, however, not fit to be discharged, were allowed to spend a day at Kew, another day they went by steamboat to the Nore; and conducting themselves well, under the charge of careful attendants, during the year visited many different public exhibitions, the National Gallery, the Crystal Palace, Marlborough House, the Zoological Gardens, Smithfield Cattle Show, &c. &c. This privilege was awarded to them gradually, and was suggested by their enjoyment and quiet demeanour when first taken for a walk round the garden: and I have no hesitation in stating that this indulgence having been highly appreciated by them, has had a beneficial effect upon their minds. If we can succeed in giving a patient the impression that we repose confidence in him, if we can make him sensible of the importance of keeping his *parole d'honneur*, we are greatly improving his mental state: for the recovery of self-respect is often the first indication of impending cure. Hence we find the reports of many lunatic asylums attesting the advantages which patients derive from such excursions."

We regret that our limited space prevents our quoting more at length from this valuable report. We can specially commend it to the notice of our readers. The tabular statements deserve careful study.

The following is the statistical statement of the medical department of the Surrey Lunatic Asylum, for 1853, published in the report for 1854:—

“At the date of our last report there were 396 male patients, and 488 female patients—together 884. Since then, there have been admitted 136 males, and 193 females—together 329; and 342 have been discharged, or died, leaving, at the close of the year, 871.

“The total number of patients in the asylum, during the year, was 1213; the highest number at any time was 911, the lowest was 864; and the average number under treatment, during the whole period, was 887.

	M.	F.	Total.
“Remaining 31st December, 1852	396	488	884
Admitted in 1853	136	193	329
	<hr/> 532	<hr/> 681	<hr/> 1213

“Of whom have been discharged—

	M.	F.	Total.			
Recovered	65	104	169			
Removed, not recovered	26	30	56			
Died	65	52	117			
	<hr/>	<hr/>	<hr/>	156	186	342
				<hr/> 376	<hr/> 495	<hr/> 871

“The number of recoveries is nearly the same as last year, being in the proportion of about 14 per cent.; that of deaths is rather greater, being about 9 per cent.

“Of the deaths of 65 male patients—

27	died of apoplexy and general paralysis.
13	„ exhaustion, general debility, and old age.
7	„ epilepsy.
8	„ pulmonary disease.
10	„ of various other causes.

“Of the 52 female patients—

17	died of apoplexy, cerebral disease, and general paralysis.
9	„ pulmonary disease.
7	„ epilepsy.
7	„ exhaustion.
3	„ old age.
7	„ of various causes.

“Three cases came under the investigation of the coroner and a jury, whose verdicts were as follows:—

“In one case, a male, ‘natural death—sudden exhaustion upon excitement, after an attack of delirium tremens.’

“In one case, a male, ‘suicide, by thrusting a portion of a glove into the throat, producing suffocation—he being insane.’

“In one case, a female, ‘natural death, from apoplexy.’”

With the exception of the tables, the report contains no facts or remarks calling for particular notice. Sir A. Morison, whom we be-

lieve prepares the tabular statements of this asylum, deserves much praise for the ability with which he conducts this department of the asylum.

From the "First Annual Report of the Norfolk County Lunatic Asylum" we ascertain that—

"During the past twelve months, 83 patients have been admitted; viz., 36 males and 47 females.

"On the 31st December, 1852, there were in the asylum, 139 males and 159 females; total, 298. The whole number under treatment during the year has been 381; the average number daily, resident, 304.91, or 139.66 males and 165.25 females.

"The number of deaths has been 36, or 19 males and 17 females; and the number of recoveries 39, or 17 males and 22 females; and the number discharged, not cured, has been 6; viz., 2 males and 4 females."

The report, which is drawn up by Dr. Foote and Mr. Firth, is entitled to our warmest commendation. We regret that Dr. Foote should have been removed from this sphere of usefulness, and sincerely hope that, ere long, he will be again in harness, and busily engaged among the insane in the work of labour and love.

We extract from the "Second Annual Report of the Derbyshire County Lunatic Asylum, for 1854," under the able management of Dr. Hitchman, the subjoined interesting particulars:—

"It is a remarkable coincidence that the admissions during the past year are almost numerically the same as those of the year 1852. From January, 1851, to January, 1852, there were admitted into this asylum, 73 male and 57 female patients, and during the year that has just passed, there were admitted,—

Males	74	} 131
Females	57	

being the precise number of females, and only one in excess of the number of males admitted during the corresponding period of 1852.

"There were more patients admitted in the month of June than in any other month of the past year—the largest number of admissions being 17 in June, 16 in April, and 13 in September. As, however, only 4 out of the 17 were of recent origin, this fact does not throw much light upon the influence of seasons in the production of the malady. The largest number of recent cases were brought to the asylum during the month of January; whether an equal number of cases sprung up in any other month of the year, it is not possible to state, as there is much reason to fear that patients are still kept back from the institution by financial and other considerations.

"In those countries where cretinism and idiotism are endemic, it has been found that the greater number of cretins were resident on the declivity of the mountains towards the north. This fact has been proved by the Sardinian Commission, and by the private researches

of scientific men, but has been most specially enforced by Dr. J. C. Hubertz, of Copenhagen. This observer has also found that insanity in Denmark is more prevalent in the northern 'herreds,' or divisions of the kingdom, than in the southern portions. All the facts which have hitherto fallen under the observation of your physician would appear to substantiate this conclusion, as far as idiocy is involved in this county, but it does not appear to hold good in reference to the number of the insane in the two divisions of Derbyshire. Of 258 patients sent from this county since 1851, 92 were from the northern division, and 166 from the southern portion, in which the town of Derby is included. The population of the two divisions being—

Northern Division	...	...	130,067
Southern Division	...	...	166,017

the proportion of the insane to their respective populations will be—

Northern Division	...	1 in every 1413 $\frac{71}{92}$
Southern Division	...	1 in every 1000 $\frac{17}{166}$

Or, leaving Derby out of the calculation, which in common with all large towns has special influences in operation upon the human mind and feelings—the statistics would be as follow:—96 from the southern division, containing a population of 125,408, making a proportion of 1 in every 1306 $\frac{1}{3}$. This would give a slight preponderance in favour of the mental salubrity of the northern division; as the parliamentary division has been taken in this calculation, some villages are included in the southern division which are, in truth, more northerly in their geographical position than those which are enumerated as northern,—for instance, Matlock in contrast with Alfretton, or Pinxton; but the population is not sufficiently large to affect in any essential degree the above conclusions. From the town of Derby 70 patients were sent, which in a population of 40,609 give a proportion of 1 in every 580 $\frac{9}{10}$.

“Even if the whole island be taken into calculation, we observe no especial exemption in favour of the southern counties. Dorset, one of the most southerly, abounds in lunatics and idiots, ranging as high as 1 in 640 of the population, while Derbyshire, Durham, and Lancashire, according to the Poor-law returns, have not above 1 lunatic or idiot in 1000 of the population. Thus teaching us that there are other causes as potent in the production or prevention of nervous diseases as geographical position.

“The social condition and occupations of the patients admitted during the year were various, as shown by the following tables:—

Males.				Females.			
Single	...	...	31	Single	...	...	30
Married	...	...	38	Married	...	...	21
Widowed	...	...	4	Widowed	...	...	6
Unknown	...	...	1				
<hr/>				<hr/>			
74				57			

When speaking of the effects of religious excitement in producing insanity, Dr. Hitchman observes,—

“All impassioned religious excitement which does not culminate in some useful act, has a tendency to agitate and overwhelm weak and sensitive persons, and that the peculiar dogmas embraced are largely determined by circumstances, and by inherent and special characteristics of the individual mind; and that it is unjust to charge upon any special religious theory the fearful consequences ascribed to the Calvinistic creed. Minds linked to a special organization become excited and bewildered by the stern, exclusive, and yet impassioned tenets of the Geneva Reformer; but then minds of another character become equally disturbed by the more diffusive creed of Wesley and his followers. Indeed, during the early career of John Wesley, it is certain that more persons became convulsed, and ultimately insane, than during the preaching of George Whitefield. Southey informs us, when speaking of the convulsions which agitated many of Wesley’s followers, that ‘These effects had never as yet been produced under Whitefield’s preaching, though they now followed Wesley wherever he went; and it appears that Whitefield, who came once more to Bristol at this time, considered them as doubtful indications at least, and by no means to be encouraged. But no sooner had *he* begun to preach before a congregation, among whom these ‘outward signs’ had *previously* taken place, and who therefore were prepared for the affection by their state of mind, as fear in times of pestilence predisposes the body for receiving the contagion, the four persons were seized almost at the same moment, and sunk down close by him. (Southey’s ‘Life of Wesley,’ p. 281.) ‘According to a moderate computation four thousand people were within a very short time affected with this convulsive malady.’—Hecker on the ‘Dancing Mania,’ p. 134. These susceptibilities are dependent rather upon constitutional peculiarities than upon the effect of special tenets; thus we have perceived in the history of individuals, that even the Holy Scriptures may breathe a solace and a peace to one individual, and yet arouse, as if with the tones of a trumpet, the combativeness and energy of another. ‘Scripture,’ said Melancthon, ‘imparts to the soul a holy and marvellous delight, it is the heavenly ambrosia.’ ‘The Word of God,’ exclaimed Luther, ‘is a sword, a war, a destruction; it falls upon the children of Ephraim like a lioness in the forest.’ The excess of *fanaticism*, its immoderate ecstasies, and selfish raptures agitate the nervous system, disorder its functions, and bring the reason and the will under the sole dominion of imagination and feeling, and thus occasionally render the individual insane and irresponsible, both in our own church or in the church of the Vatican, as in the wildest of the sects which spring up in this and other countries; but where one man now falls a victim to ‘religious excitement,’ ten others are the prey of exhausting anxieties contingent upon commercial affairs—the fatigues of overwork—or of vicious indulgence in forbidden pleasures; whilst to many in asylums, as to thousands in the world, the religion of the Gospel has been ‘a message of glad tidings,’ and a balm, a consolation, and a peace more sustaining and restorative than any other single agency.”

Dr. Hitchman says, when speaking of the causes of insanity,—

“In a very large proportion of the cases the malady was hereditary—and on more than one occasion during the past year, two and three members of the same family have been under treatment at the same time. Intemperance, domestic trials, disappointed affections, and bodily ailments of a special kind have been the other most clearly ascertained causes, and their frequency has been in the order in which they have been enumerated.”

Again, when referring to the effect of “anxiety” and “mental shock” in disturbing the functions of the brain, Dr. H. observes,—

“Emotion and shock are far more frequently the cause of insanity than prolonged intellectual exertions of any kind. Intellectual labour rarely disorders the mind permanently, unless *anxiety* or some other powerful emotion is superadded to it. The student ambitious of distinction and fearful of defeat—the merchant harassed by business, and dreading an altered position in his circumstances, or the discredit and disgrace of bankruptcy—the devotee perplexing himself with conflicting creeds, anxious to be of the true church and yet distrustful of his previous convictions—the fanatic yielding himself up to wild and rapturous emotions—the mechanic or labourer toiling too much under the anxieties of home and family—are all engaged in dangerous pursuits, which have wrecked and will continue to wreck many minds, no matter what may be the peculiar study, the especial business, the particular creed, the special sect, or the kind of labour which may be engaging their respective attentions. In carefully investigating the histories of patients, it has been usually found that physical weakness and moral shock have combined to produce the unhappy result.”

It is undoubtedly true that there exists an essential distinction between the pathological effects of pure intellectual exertion and emotional influence; but we do not agree entirely with our author, that “intellectual labour rarely disorders the mind permanently.” We have seen *many* distressing cases of incurable insanity, which would clearly be traced to “intellectual labour.” Softening of the brain and permanent impairment of the intellect, ending in general paralysis, according to our experience, are often the consequences of excessive devotion to literary and intellectual pursuits. We admit, however, the difficulty of disassociating severe intellectual work from anxiety of mind; they appear to us very often to proceed *pari passu*. When speaking of the medical treatment of insanity, Dr. Hitchman observes,—

“In cases of aggravated hysteria associated with corporeal debility, the tincture of sumbul combined with Battley’s sedative, has been a most useful medicine, and especially when the milder preparations of iron, such as the citrate, have been administered in the interval.”

When referring to the question of “Non-restraint,” our author remarks,—

“No less than forty-seven suicidal individuals have been under treat-

ment, and some of these have been so energetically bent upon effecting their purpose, that it was impossible to leave them for day or night for many weeks in succession. A few of them involved great responsibility, and formed, indeed, these especial cases which are said to test and to refute the principle of non-restraint. The opponents of this practice are constantly asking—"What would you do with a man who had cut his throat and was determined to pull it open again after it had been dressed?" Indeed, all kinds of imaginary cases are conjured up, to which you are expected to give an explicit and categorical reply. But no treatment can be defined for such ideal cases, and no defined treatment will succeed (because never *heartily* carried out) in the hands of an unbeliever in the efficacy and humanity of the principle."

We should be disposed, with deference to Dr. Hitchman, to repeat the question he has put into the mouth of "the opponents of this practice," and ask, how *he* would treat a case of this kind? We cannot conceive why Dr. Hitchman should call such cases "imaginary" or "*ideal*," when they are of ordinary occurrence. Lunatics do, alas! sometimes cut their throats—ligatures are occasionally required for the treatment of these cases; and patients resolutely determined upon self-destruction often do their utmost to effect their purpose, by tearing the wound open! Under such distressing circumstances, who would for one moment question the necessity and humanity of preserving life, by restraining the hands of the patient until the wound has cicatrised?

We find nothing in the "Fifty-eighth Annual Report of the Friends' Retreat for 1854," calling for special comment. We can only afford space for one extract. Mr. John Kitching, the resident medical officer, when speaking of the treatment of the insane, justly remarks:—

"That mode of treatment approaches most nearly to our idea of perfection, which adapts itself to the specialities, physical and moral, of each case, and seeks to maintain each individual in the highest condition of which his mental faculties are capable. Kindliness and sympathy for suffering and misfortune form the foundation-stone on which all effectual treatment is based. It may, however, happen that the kindest treatment requires a very different plan to be pursued from what the patient may approve, and he may form a very mistaken estimate of that which is really the most conducive to his welfare; to him the greatest kindness may put on the disguise of its opposite, and the conductors of asylums must be prepared to be misunderstood and misrepresented in much that they do with the single-hearted desire to promote the interests of those under their charge."

There are several valuable tabular statements appended to the report, to which we can only direct attention. We glean the following statistical facts from the "Third Annual Report of the Medical Superintendent (Dr. Thurnam) of the Wilts County Asylum":—

"At the beginning of the year which has now expired, there were

in the asylum 219 patients; namely, 103 males and 116 females. In the course of the twelve months, there have been 105 cases admitted; of which 44 were males and 61 females:—the average being almost precisely at the rate of two cases per week. Of the whole number of admissions 18 were persons who had previously been discharged, or cases of re-admission. There are now in the asylum 255 patients; namely, 110 males and 145 females. The average number resident during the year has been 244.6.

“There have been 46 discharges; and of this number, 34 were considered as recovered when they left the asylum. The majority of the remainder were much improved in their mental condition, and were for the most part discharged at the request of their friends. A few were removed to other asylums, as not chargeable to parishes in Wiltshire. Two patients are absent on trial.

“Of the whole number discharged since the opening of the asylum, 19 cases have been re-admitted during the year, in consequence of a relapse or recurrence of the disorder.”

Dr. Thurnam, when referring to the liability to relapse in cases of apparent recovery from attacks of insanity, observes—

“Many also, who whilst subject to the regular discipline of an asylum, appear well and fully capable of self-government, are no sooner at liberty than they display symptoms of the disorder, which had been restrained or concealed, rather than eradicated or cured.”

According to our experience, such is often the case. It is said that Zimmerman, the author of the celebrated work on “Solitude,” was never sane outside of the walls of a lunatic asylum, but became rational and free from excitement soon after being placed under restraint; but immediately upon his release, relapsed into his former condition.

The statistics of the “Lincolnshire County Lunatic Asylum” for the past year are conveyed in the following paragraphs, taken from the first annual report. This asylum, we would premise, was opened for the reception of patients on the 9th of August, 1852:—

“On the 31st of December, 1853, the number of patients who had been admitted was as follows, viz.:—84 men and 92 women from other asylums; 8 men and 12 women from workhouses; and 64 men and 57 women from their homes; making a total of 317 patients, of whom 156 were men and 161 women.

“Seventeen men and 18 women were discharged recovered; 5 men and 3 women (out-county patients) were removed to other asylums; and 19 men and 14 women died; making the total of discharges and deaths 76—41 men and 35 women.

“The numbers remaining in the asylum on the 1st of January, 1854, were 115 men and 126 women; total, 241.

“The average daily resident number for the year 1853 was 228.23; and for the whole period of seventeen months, 205.81.

“The mortality was 10.41 per cent. of the whole number under treatment, and 16.03 per cent. of the mean resident number; which, regarding the infirmities and bad bodily condition of a large number

of the patients when admitted, is by no means an unfavourable result."

Nothing can be more just than the following remarks on the importance of early and prompt treatment:—

"In cases of recent occurrence, however, the importance of early removal cannot be too strongly urged. All experience and all authority assert that when once insanity is manifested, the very foundation of curative treatment consists in removing the patient from the external influences which have occasioned or are likely to protract the disorder, in overcoming resistance to remedial agents, and in adopting an appropriate regimen and diet. These conditions of treatment, so far at least as the indigent classes are concerned, can only be complied with by removal to an asylum; and any delay in effecting this, whether from false economical motives on the part of parish authorities, or from repugnance of friends to the separation, is fraught with injury to the patient and ultimate expense to the ratepayers. A week's procrastination may protract the treatment to months; a month's delay may allow a favourable crisis to pass by unimproved, and determine the chronic stage of the disease."

When alluding to the previous occupations of the patients admitted, as well as the hereditary character of the insanity, it is observed—

"As would be expected in a county whose population is essentially agricultural, the admissions have included a large number of farm-labourers, their wives and families. From the healthful and unexciting nature of its employment, it might be supposed that such a population should enjoy a larger immunity from insanity than that of manufacturing counties, but such does not appear to be always the case. The proportion of insane paupers to the population of Lancashire is as 1 in 1083, in the West Riding of Yorkshire as 1 to 1176, and in Staffordshire as 1 to 1079; while in Lincolnshire it is as 1 to 806—a proportion which, it is believed, is largely attributable to hereditary predisposition. In many of the cases received from the towns the mental disorder has been distinctly traceable to habits of intemperance and dissipation; but in those coming from the rural districts of the county such causes have been comparatively rare, and a congenital want of mental power to resist ordinary excitants and depressants has appeared pretty generally to have been the *fons et origo mali*."

A high authority has declared that the stomach-pump is never necessary in the treatment of the insane. What would, we ask, have become of Dr. Palmer's patient if he had not forced food into the stomach by means of this instrument?

"A few instances of refusal of food have occurred, but, with the exception of one female patient, yielded to change of diet and medical treatment. The patient alluded to fell, soon after her admission, into a cataleptic state, during which no inducement whatever succeeded in getting her to swallow anything. If her mouth was opened, and food put into it, she would remain with the food resting on her tongue

until somebody removed it. After several days' abstinence her strength began to fail, and the odour of her breath indicated that feeding could be no longer delayed with safety. The stomach-pump was employed three times a-day, without her offering the least resistance, for six weeks, when her health became much improved, and she began to eat again of her own accord. She subsequently mended very rapidly, and has since been discharged quite recovered."

There appear to have been four inquests at the asylum; one patient died during a fit of epilepsy; the second died suddenly from ulceration and perforation in the upper portion of the intestinal canal; the third was a case of suicide from hanging; and the fourth case was "also a male patient, who died in consequence of his ribs having been severely injured during a paroxysm of maniacal violence, and while two of the attendants were conveying him down a flight of stairs for the purpose of placing him in a padded-room. The verdict returned by the jury was 'homicide by misadventure.' The whole of the circumstances attending the case were subsequently investigated at a special meeting of the visitors, who were of opinion that the verdict of the inquest was entirely supported by the facts."

We do not affirm this accident could have been averted if the strait-waistcoat had been at once applied; but of this we feel *strongly convinced*, that it is much more humane to apply such restraint for a short period than for four or five powerful men to struggle with a patient in "a paroxysm of maniacal violence." Severe and serious injuries may and do often occur from these absurd contests with the insane.

Dr. Palmer's report does him great credit. We congratulate the committee on having so active and intelligent an officer at the head of the Lincolnshire Asylum.

According to the "Eighth Annual Report of the Medical Superintendent of the Devon County Lunatic Asylum, for 1850," there were admitted—

"During the past year, 96 patients, of whom 49 were men and 47 were women. The largest number resident at one time was 472; the number under treatment has been 555; and the average number resident has been 460.

"The number of patients at the commencement of the year was 459; and the number resident at this date is 445, of whom 195 are men and 250 are women.

"Sixty-two patients have been discharged, of whom 26 were men and 36 women; of these 55 were discharged recovered—6 were discharged relieved—and 1 unimproved.

"Forty-seven patients have died, of whom 25 were men and 22 were women.

"The mortality which last year was 6.6 per cent. of the average

number resident, has this year been 10 per cent. of that number, and 8.4 per cent. of the number under treatment.

"Many of the patients whose deaths have this year swelled the obituary, were admitted in a dying state. No. 1072, a melancholic, was unable to retain any food after admission, and died in twenty-six days, from disorganization of the stomach. The appearance of this organ suggested the probability that the unhappy man had taken some deleterious substance before admission, with a suicidal intent.

"No. 1099 was admitted in a state of extreme exhaustion, from general paralysis, with mania, and sank twenty-two days afterwards from decay of the powers of nature. No. 1151, who died in six days after admission, was a similar case. No. 1100, a miner, was admitted with both lungs in a state of disorganization from that form of consumption, known as coal miners' lung; he survived about four months. No. 1110 survived nearly as long; he had sustained two attacks of apoplexy, and was suffering, on admission, from double hemiplegia, which paralysed both sides of the body, and left him in the most perfect state of wreck—mental and bodily. No. 1163, who had been insane three years, (but had only recently become chargeable), was admitted in a dying state, with one lung and part of the other in a state of decomposition, from pneumonia; he survived sixteen days. No. 1168, admitted with inflammation of the intestinal canal, survived six days. With the exception of the last, who was 68 years old, the above patients were of middle age.

When speaking of medical and moral treatment of the cases confided to his care, Dr. Bucknill observes,—

"During the past year no efforts have been neglected which were requisite to maintain the medical treatment of the patients in proximity with the ever-advancing steps of medical science. Among the novelties of treatment it may be mentioned that epilepsy has been relieved in the most satisfactory manner by tracheotomy; that dementia has been relieved by phosphuretted oil; that chorea with mania, threatening a fatal termination, has been cured by the internal administration of chloroform; and that extreme excitement, in which other remedies had failed, has been removed by frequent small inhalations of the same remedy. Of these results some have already been communicated in detail to the profession, and others will be so through more appropriate channels than this general report.

"The same system of moral treatment mentioned in former reports has been continued with satisfactory results in the recovery of those patients whose malady was capable of cure; and in the reform of bad habits, the amelioration of symptoms, the increased quietude, comfort, and happiness of those whose malady is irremovable, and for whom the asylum must be considered a permanent home.

"During nine months of the year (and in all the wards except those occupied by the idiots) the evening reading classes are kept up with benefit and punctuality four evenings in every week. Of the other three, one is devoted to the duties of Saturday night, and the other two to recreation.

"During the three summer months the evening reading classes are discontinued, as the patients remain in the pleasure grounds until bedtime.

"The useful and profitable employment of the patients has been carried as far as appeared to be consistent with their sanitary condition."

Appended to the report are several valuable tables, and a highly eulogistic report from the Commissioners in Lunacy, who speak in glowing terms of the condition of the asylum. With deference to the medical officers of county asylums, we question the good taste of publishing these reports of the official visits of the Commissioners; they are not written for publication, and we think should not be ostentatiously paraded in the annual records of the asylum. However, Dr. Bucknill errs, if error it can be called, in good company, and is only adopting the course generally pursued by all the medical superintendents of public asylums.

The "Sixteenth Annual Report of the Suffolk Lunatic Asylum" embodies many interesting particulars. But first, as regards the statistics of the asylum, it appears from Dr. Kirkman's statement that—

"At the close of the last year there were 255 patients in the house; there have been admitted in this year 93; 42 have been discharged cured; 9 have been removed or returned to their friends very much relieved, and 36 have died. The numbers of male and female patients have been nearly equal in the admissions, discharges, and deaths.

				M.	F.
Admitted	...	...	...	49	44
Discharged	...	...	...	22	20
Ditto relieved	...	...	...	2	7
Died	...	...	...	19	17

"These numbers show but little variation in any respect from those of the late previous years. The mortality, which was unusually low last year, has been increased by nine this year; an event most fully anticipated, and noted in the report for 1852, from the different stages of great bodily exhaustion, in which many of the aged inmates were received."

The subjoined facts speak volumes in favour of this institution:—

"If the general expressions of contentment amongst the patients are any proof of this healthy feature, we have as conspicuous indices to judge by as any to which we could point at any time. A man after an absence of several years was lately re-admitted; he was a tailor, and directly he entered the house he went up to take possession of his former place of occupancy, and he asked for some work with the expression of satisfaction, 'Well, I'm glad to get home again.' It is this home character that we would endeavour to secure; and lest the paramount importance of this domesticity should ever be lost sight of, it may be well to record it as being the chief object of at-

tainment for successful treatment of the insane. They are almost universally ready to recognise it themselves, and it is a feeling which is very seldom disturbed or broken by the patients in this house.

"The truth of the above was shown in no small degree only a few weeks back, by two out-county patients who left us for Essex. They were both old residents; one having been here twenty-one years, the other twenty-five years. They were much distressed at leaving, the longest resident the most so. She had always looked upon this house as her permanent home, and she would echo the desire of another old patient, most singularly but expressively conveyed, 'that she should have the *privilege* of being buried in the asylum ground.' This attached faithful creature had been for all these years a most valuable assistant in the wash-house and laundry, she was always regularly and willingly employed. Three days in the week in each of these places she worked for twenty-five years, taking little notice of others, unless something *very* provoking excited her displeasure. When she was prevented from going into the laundry on the morning of her expected removal, and when the reason of it was explained to her by signs (for she was very deaf), she looked very sorrowful, and said, 'she would not take any clothes with her, but leave them till she should come back again,' she positively refused to believe that she was going entirely away. It was a 'sorry sight' to witness the removal of this grateful and attached patient: as the carriage came up to the gate she turned very pale, and the tears dropped into her lap, as she took leave of one after another, fondling over them and kissing them. Her industry had procured her some trifling articles of fancy dress, and which always delighted her, but she could not be persuaded to take any of them with her. We have always encouraged this feeling of possession in trifling changes of dress, and we look on it as one of no small importance to gratify."

We have only room for the following account of a remarkable case of attempt at suicide. We would premise that this patient had on several previous occasions endeavoured to accomplish self-destruction. Immediately before admission he had tried to strangle and drown himself:—

"On the afternoon of the 15th the house surgeon was suddenly called to him by his attendant, and he found him suffering from symptoms evidently arising from the existence of some foreign body in the throat, nothing either solid or fluid could be swallowed, there was a choking sensation with sudden spasmodic cough. A probang with an ivory top was introduced into the œsophagus, which rested half-way between the lower part of the pharynx and the cardiac orifice of the stomach upon something *hard*. By careful manipulation this substance was pushed down into the stomach, and now several hard bodies conveying the sensation of *stones* could be distinctly felt with the probang. Upon questioning the man he acknowledged that he had swallowed 200 common gravel stones, with the hope that they would kill him, at the same time he expressed great thankfulness for

the relief afforded him and promised never to attempt self-destruction again. By repeated doses of castor-oil a great number of stones were brought away, and all were supposed to have passed safely through. At the end of six days, however, he sent for the house-surgeon again, saying that there was a large stone at the lower end of the bowel, and he could not pass it. On the introduction of the finger, several stones with sharp jagged edges could be distinctly felt impacted in faecal matter, and the mass appeared to be so large that it seemed impassible without laceration. Whilst an enema was being prepared for him, he suddenly passed a large mass, $8\frac{3}{4}$ inches in circumference, and containing seventy-two stones, and many small pieces of brick, &c., the whole weighing nearly 7 ounces. There was no laceration. His bodily health improved after this, but his mind remained unsettled. It was imagined and hoped that this unsuccessful effort, with its painful instruction, would have been his last attempt, but it was not so. He continued with maniacal obstinacy to resist all food, and he was obliged to be fed frequently by the stomach-pump with good beef-tea and wine. On the 11th of August he made another fearful attempt to burn himself to death. He was assisting the attendant in cleaning the galleries, with several other patients about him, when, as if on a sudden impulse, he ran and threw himself into the fire under the bath. He burnt his chest a good deal and the cartilages of his ribs; and for a long while he refused to take any medicine, or to have any application to the burn. He has of late, however, been gradually more yielding, and is now very much better, and recovered entirely from the injury; he will occasionally talk with some degree of cheerfulness, and seems apparently struggling against an almost irresistible impulse. Though this is a very aggravated case (the man literally having tried every element, earth, air, fire, and water, to accomplish his end), it is only one out of the number alluded to before."

This is a type of case met with in most asylums, public and private. Considering the degree of indulgence and liberty extended towards the insane in all well-conducted asylums, as well as the cunning, ingenuity, and cleverness frequently manifested by such patients, we are astonished that accidents of this kind do not more frequently occur.

It appears from the "Sixth Report of the Somerset County Lunatic Asylum for 1853," that "at the termination of 1852 the number of patients remaining in the asylum were 342, being only an increase of 2 on the preceding year. In 1853, the admissions have been 69 males, 64 females, making a total of 133; of these 7 males and 12 females were re-admissions. During the year there were discharged 33 males, 30 females; and died 28 males, 21 females; total at the end of the year, 363."

Dr. Boyd's report is full of interesting matter. The tables are extremely valuable, and must, in their preparation, have entailed upon him great labour. They are well worth the study of all engaged in

these abstruse inquiries. The analysis appended to the tabular statements very much enhances their importance.

The last "Annual Report of the Medical Superintendent of the Dorsetshire County Lunatic Asylum" contains a gratifying account of the condition of that institution. It appears "there have been admitted during the year 36 patients, (19 males and 17 females); 14 patients have been discharged, (8 males and 6 females); and 7 have died."

The report contains the usual statistical tables, which appear to be carefully drawn up.

We have before us the "First Annual Report of the Joint Lunatic Asylum for the Counties of Monmouth, Hereford, Brecon, Radnor, and the City of Hereford." This asylum was built for 254 patients, at a cost of 37,083*l.*, including the purchase of a site and all expenses, at a cost of 146*l.* per head. The report says,—“With a probable additional outlay of 1200*l.*, which ought to be immediately undertaken, they will have a building capable of receiving 306 patients, at a cost of 125*l.* per head.”

The charge for the "maintenance was, from the opening of the asylum to the 31st December, 1852, 10*s.* per head per week; since that time it has been 8*s.* 6*d.* In consequence of the present high price of provisions the charge must be again raised to 10*s.*"

Dr. Allen presents us with the following statistics of the asylum:—

"A second year has now elapsed since the opening of this asylum for the reception of the insane poor.

"At the close of the year 1852 there remained in the asylum 207 patients, viz., 88 males and 119 females. 93 persons have been admitted during the year 1853, 46 males and 47 females; of these 1 male and 1 female were criminal lunatics, admitted under the warrant of the Secretary of State. There have been 6 re-admissions during the year.

"The discharges during the year have amounted to 42, viz., 23 males and 19 females; of these 22 males and 18 females were recovered or relieved, and 1 male and 1 female were discharged by the desire of friends, but they were not improved.

"The deaths during the year have amounted to 24, viz. 10 males and 14 females. The mortality, it will be observed, among the males has decreased, while that of the females has considerably increased in comparison with that of the previous year—one person died two days, one three days, one eight days, one ten days, one fifteen days, and one a month after admission. With two exceptions, all had well marked symptoms of cerebral disease, which in the majority of cases was verified by post-mortem examinations. The two exceptions were, one a female, who on admission was suffering from acute phthisis complicated with intermittent mania, the other an idiotic girl, who died from inflamed sore throat.

"There now remain in the asylum 234 patients, viz. 101 males and 133 females."

It appears from the last report of the "Littlemore Asylum for 1853," under the medical superintendence of Mr. William Ley, that—

"The number of patients resident, at the close of the year 1853, was 28 more than at its opening. It had risen from 366 to 406, and had again been reduced to 394. The admissions in the year (including the readmission of three patients within twelve months of their discharge, and eleven after longer periods,) were barely less than in preceding years, being 107; they were in 1852, 109; the average number of patients sent by their parishes in five years was 110 in each. The recoveries (39 in number) were equal to those of the previous year; and the mortality (namely, 34 deaths) was diminished."

The report contains the usual number of tables and a full detail of the yearly expenditure of the asylum. The former we cannot transfer to our pages, and the latter has only a local interest.

The "Report of the Gloucester County Lunatic Asylum for 1853" contains little else than numerous tabular statements. Dr. Williams has made no special report; of course the statistical tables are drawn up by himself, and for these he is entitled to credit. The following information we extract from the report:—

	1st Class.		2nd Class.		3rd Class.		M.	F.	Total.
	M.	F.	M.	F.	M.	F.			
Remaining in the house, Dec. 31, 1852	9	6	15	14	115	151	139	171	310
Admitted during the year ...	5	1	4	7	56	55	65	63	128
Re-admitted	2	...	2	1	10	9	14	10	24
Chronic cases re-admitted from Fairford ... ..	...	...	...	...	...	21	...	21	21
Total under treatment during the year	16	7	21	22	181	236	218	265	483
Discharged—									
Recovered and gone ...	3	...	9	4	16	23	28	27	55
Out on trial ... ..	...	...	...	...	1	...	1	...	1
Relieved	2	...	1	...	5	2	8	2	10
Not relieved, removed by friends ... ..	...	...	1	1	...	1	1	2	3
Died ... ..	...	...	1	1	24	14	25	15	40
Total	5	...	12	6	46	40	63	46	109
Remaining in the house, Dec. 31, 1853	11	7	9	16	135	196	155	219	374

Average number in the House each week in the year 355
Ditto attending Chapel (two Services) ... 289
Ditto daily employed 216

Total number admitted from opening of Institution in 1823										2871
Ditto	discharged	...	...	...	...	ditto	...	...	...	2497
Ditto	recovered	...	...	...	...	ditto	...	...	...	1454
Ditto	relieved	...	...	...	...	ditto	...	...	...	183
Ditto	removed or transferred	...	...	...	...	ditto	...	...	...	253
Ditto	discharged, harmless or improper,	...	...	...	...	ditto	...	...	...	73
Ditto	died	...	...	...	...	ditto	...	...	...	533
										<hr/>
Ditto	remaining on the Books	...	...	...	...	...	...	...	...	375
Out on trial	...	...	...	...	...	...	...	...	...	1
										<hr/>
Remaining in the House, Dec. 31, 1853										370"

According to the "Fortieth Report of the Staffordshire Lunatic Asylum," under the medical superintendence of Mr. Wilkes, there were, at the termination of the year 1852,—

"Four hundred patients in the asylum—viz., 212 males and 188 females. During the year 1853, 91 males and 81 females were admitted, making a total of 572 patients under treatment. Of these, 43 males and 53 females have been discharged recovered; 11 males and 8 females relieved or incurable; and 34 males and 24 females have died; leaving on the 31st December, 399 patients in the house, of whom 215 were males and 184 females.

"The average number of patients resident throughout the year was 405.

"The admissions have slightly exceeded those of the previous year, being respectively 172 and 166. Of these 107 may be termed recent cases, the disorder being reported to have existed for various periods not exceeding six months, whereas in the previous year only 87 were of this class. Fifteen were stated to have been insane from 6 to 12 months, and 50 for much longer periods; consequently nearly the whole of these must be regarded as chronic and incurable cases, and a permanent burden to the rate-payers."

It appears from the "Report of the Physician of St. Luke's Hospital for 1853," that, during the preceding year,—

"Fifty-eight male and 117 female patients have been admitted, there having remained from the previous year 26 males and 63 females, under treatment, making together 84 males and 180 females; of these 37 men and 82 women have been discharged cured, 12 men and 28 women uncured, and 6 men and 8 women have died; 5 men and 12 women have been removed at the request of friends. The total number therefore of patients discharged cured is 119, uncured 40, deaths 14; giving a per centage of 68·79 cured, of 23·12 uncured, and of 8·09 deaths.

"The per centage of recoveries has been higher this year than in any previous year, except those of 1842 (when it was 70·37) and 1851 (when it was 74·01)."

The physicians (Drs. Sutherland and Philp) report favourably of the sanitary state of the hospital. They recommend to the governors the establishment of a branch asylum, and propose that a farm should

be purchased in the neighbourhood of London, for the reception of boarders and convalescent patients. We hope the governors will take this excellent suggestion into immediate consideration. Eight cases of recovery are referred to in which the insanity had existed for from five to twelve years!

The "First Annual Report of the Medical Officers of the Norfolk County Asylum" is evidently drawn up with great care by, we presume, the late resident physician, Dr. Foote, who was, we think, so unfairly dismissed from the institution. The subjoined facts will illustrate the statistics of the asylum:—

"During the past 12 months, 83 patients have been admitted—viz., 36 males and 47 females.

"On the 31st December, 1852, there were in the asylum 139 males and 159 females; total, 298. The whole number under treatment during the year has been 381; the average number daily resident, 304·91, or 139·66 males and 165·25 females.

"The number of deaths has been 36, or 19 males and 17 females; and the number of recoveries 38, or 16 males and 22 females; and the number discharged, not cured, has been 6—viz., 2 males and 4 females."

The "Report of the Lunatic Asylum at Rainhill for 1853" contains no extractable matter likely to prove interesting to our readers, with the exception of the subjoined table:—

ADMISSIONS AND DISCHARGES DURING THE YEAR 1853.

	M.	F.	Total.	M.	F.	Total.
Remaining in the Asylum, Jan. 1, 1853	170	204	375			
Admitted during the year	75	70	145			
				245	274	519
Discharged recovered	29	23	52			
Ditto improved	1	1	2			
Ditto unimproved	1	4	5			
Escaped	2	1	3			
Died	31	28	59			
				64	57	121
Remaining in the Asylum, Jan. 1, 1854 ... ..	...	...	...	181	217	398
Per centage of recoveries on the numbers under treatment ...	...	...	...	...	...	10
Per centage of deaths on the numbers under treatment ...	...	...	...	...	...	11·30
Per centage of recoveries on admissions during the year ...	...	...	...	...	...	35·85
Average number resident during the year ... ..	...	...	...	...	...	394

Having briefly analyzed the reports of the English asylums, we now proceed to consider the Scotch institutions for the insane. The

"Fortieth Annual Report of the Glasgow Royal Lunatic Asylum for 1853," under the able management of Dr. Mackintosh, the resident physician, is of peculiar interest. In the preliminary portion of the report, Dr. Mackintosh refers to the remarkable increase of cases of lunacy in the west of Scotland, by which all the accommodation, good, bad, and indifferent, has been called into requisition. It appears that—

"The number of patients admitted during the year was 319, being 53 more than last year. And the increase would have been greater had it not been found necessary to cease admitting patients for the reason already specified—viz., the want of room. So great appears to be the increase of lunacy in this part of the country, that though a very great number of patients have been taken to parochial receptacles whenever the parish was of sufficient population to admit of having a poor's house, the numbers in this asylum have always, more or less, tended to increase."

When attempting to account for this increase of cases of insanity, Dr. Mackintosh observes,—

"The more immediate cause of the increase of lunacy is to be sought for rather in the social condition of the time in which we live. Ours is a time of great mental activity and excitement. Men's minds are constantly on the stretch. Nor is this state of things confined to the higher and more opulent classes of society. Among the great mass of the labouring population during the past year, there has been much commotion and excitement, manifesting itself particularly in the shape of 'strikes,' and the like. There has been, if not war, at least rumours of war. In the increase of population, and the excitement of the times, in the varied mental emotions to which passing events have given birth, and probably to the increase of intemperance, do we look for the more immediate cause of the increase of lunacy which has characterized the past and some of the preceding years."

According to the statistics of the asylum, it appears that—

"The cases of mania exceed those of monomania, including melancholia; that the number of males exceeds that of females; and that the ratio of melancholia to mania is much higher in females than in males."

The number of married and unmarried patients were nearly equal. The married and widowed together considerably exceed the number of those unmarried. The ages of the patients—

"Range between 20 and 90. There were none under 20 years of age. Between the ages of 30 and 50, or in the prime of life, it is found that there were by far the greatest number of patients."

It appears that the cases of insanity from intemperance were in a ratio of 1 to 5 in the whole number of patients admitted. Hereditary predisposition appears to have been a fruitful cause of insanity. It is observed that—

"It sometimes happens that two, three, or even four members of the

same family are confined in asylums at the same time; and there are some families who have at least one member constantly in confinement. From the unwillingness which the friends of patients manifest to reveal the circumstance of the previous existence of insanity in the family, whether in the direct line or in lateral branches, the above can only be considered as an approximate estimate of the numbers of those in whom the malady is hereditary."

Dr. Mackintosh says that—

"In those admitted during the past year, we find that the physical causes very much exceed both the moral and mental ones combined, a result which does not coincide with the speculations of many eminent men on this subject, and which may, according to M. Guislain, arise from insufficiency and incorrectness of investigation, or the want of close personal intimacy with patients. As to the latter circumstance, it is to be remarked, that a very great number are either unable or unwilling to give correct information on the subject, and that the information which many communicate is found to be manifestly and totally at variance with the truth. As to the insufficiency of investigation which is supposed to be inevitable, in the inquiries of physicians connected with large public institutions, this may be true to a certain extent, as regards the minute psychological analysis, which is presumed to be necessary to the discovery of the moral causes, by which, in many cases, the disease has been produced."

This physician concludes, from the table recording the occupations of those who were admitted, that one occupation does not predispose more than another to insanity. He says, "The active or sedentary, the mental or physical nature of the occupation does not seem to exercise any particular influence in the production of mental disorder."

One hundred and sixteen patients were discharged as cured. Out of this number—

"Thirty-eight males and 57 females were cases of mania; 3 males and 16 females were cases of monomania; and one male and one female were cases of dementia;—in all 42 males and 74 females.

"Of the whole, 50 or about one-half were less than a month ill previous to admission, showing what all statistics prove, that recovery is most likely to occur if the patient is put early under treatment; that the probability of recovery becomes less and less according to the length of time during which the patient has been ill previous to admission till all reasonable hope disappears."

When speaking of the social treatment of the insane, Dr. Mackintosh makes some sensible remarks:—

"To many who are convalescent, the restraint of an asylum becomes irksome in the extreme; but when there is a large number freely associating with one another, and meeting daily—in the library, billiard-room, or drawing-room, in the bowling-green, and in the grounds of the asylum—friendships are formed and feelings are excited of a wholesome and salutary kind; so much so, indeed, that not unfrequently, however strange it may appear, it happens that some

leave the asylum with feelings rather of regret than pleasure. And though such feelings are considerably modified by return to the active business of life, they delight to revisit and correspond with their less happy friends in affliction."

We regret that the pressure of other matter upon our space deprives us of the pleasure of quoting more at length from this excellent and interesting document. This asylum, we can report from personal examination, is in capital order, and reflects great credit upon the talented physician who presides over it. Dr. Skae's "Report of the Royal Edinburgh Asylum for 1853" is, like the preceding one, replete with valuable and interesting matter.

The subjoined table gives the general statistics of the year:—

	Males.	Females.	Total.
Number of inmates at the close of 1852...	275	268	543
Admitted during the year 1853	103	133	236
Total number under treatment ...	378	401	779
Discharged...79 M. F. T. 78 = 157			
Of whom were cured ... 58 50 = 108			
" " uncured... 21 28 = 49			
Died ... 36 41 = 77	115	119	234
Total number at the close of 1853	263	282	545

Average number daily resident during the year 1853.

Males.	Females.	Total.
273 $\frac{134}{365}$	280 $\frac{30}{365}$	553 $\frac{164}{365}$

When speaking of the causes of insanity, Dr. Skae remarks:—

"Of the males, two were caused by imprisonment; in the one, the disease was suddenly developed by the shock experienced at being imprisoned on a charge of theft, of which the lad continued to protest his entire innocence; and, in the other, the insanity seemed to have developed itself under the peculiarities of prison discipline acting upon a mind naturally weak. In another, the terrors incident to having been left alone in a house with the dead body of his master; and in another the anxiety, and fatigue, and grief of nursing a young gentleman who died, appear to have operated in the development of the malady. Two of the young men had been abroad; the one in America, the other in Australia; and in both the novelty, excitement, and mode of living, are supposed to have been the principal causes of the insanity. Of the females, three became insane as the sequence of early marriages, for the anxieties and responsibilities of which they were incapacitated, partly by natural deficiency, and partly from deficient education. Three were servants, brought up in the innocence and seclusion of pious homes in the remote north, and suddenly exposed to the worry, and exactions, and temptations attendant upon service in metropolitan houses."

We quote *in extenso* Dr. Skae's account of the *post mortem* examinations made in 61 cases:—

"Of those examined, 3 had been cases of acute, 2 chronic, and 1 periodic mania, 23 dementia, 3 dementia with epilepsy, 1 mania with epilepsy, 1 melancholia, 1 moral insanity, 1 delirium tremens, 11 monomania, 12 general paralysis, 2 congenital imbecility.

"Calvarium was of unusual thickness in 32 cases: 1 of chronic mania, 1 of acute dementia, 13 of dementia, 1 of dementia with epilepsy, 5 of general paralysis, 8 of monomania, 1 of moral insanity, and 2 of congenital imbecility.

"Calvarium was thinner than usual in 13 cases: 3 of acute mania, 1 of chronic mania, 1 of melancholia, 3 of dementia, 2 of monomania, and 3 of general paralysis.

"Diploe was absent in 14 cases: 1 of acute mania, 1 of acute dementia, 6 of dementia, 3 of monomania, 1 of moral insanity, 1 of general paralysis, 1 of congenital imbecility.

"Elongation of anterior clinoid process on right side was observed in one case of mania with epilepsy.

"Ætheromatous deposit in arteries of brain was found to a great extent in one case of general paralysis.

"Increased thickness of dura mater was found in 18 cases: 1 of acute mania, 1 of moral insanity, 4 of dementia, 2 of dementia with epilepsy, 3 of monomania, 6 of general paralysis, and 1 of congenital imbecility.

"Thinness of dura mater was noticed in 5 cases: 3 of dementia, 1 of monomania, and 1 of general paralysis.

"Ossific deposit in falx cerebri existed in 2 cases: 1 of dementia, and 1 of monomania.

"Adhesion of dura mater to calvarium existed in 17 cases: 3 of acute mania, 1 of chronic mania, 1 of melancholia, 3 of dementia, 1 of dementia with epilepsy, 5 of monomania, 1 of moral insanity, 1 of general paralysis, and 1 of congenital imbecility.

"Opacity and thickening of arachnoid was found in 39 cases: 2 of acute mania, 1 of periodic mania, 1 of chronic mania, 1 of acute dementia, 9 of dementia, 1 of dementia with epilepsy, 1 of melancholia, 7 of monomania, 2 of moral insanity, 12 of general paralysis, and 2 of congenital imbecility.

"Crystalline-like deposit over general surface of arachnoid was noticed in two cases: 1 of dementia, and 1 of general paralysis.

"Congestion of membranes was noticed in 19 cases: 2 of acute mania, 1 of periodic mania, 1 of chronic mania, 7 of dementia, 1 of dementia with epilepsy, 2 of monomania, 4 of general paralysis, and 1 of congenital imbecility.

"Adhesion of membranes to cortical substance was found in 10 of general paralysis.

"Serous effusion into sac of arachnoid existed in 53 cases: 3 of acute mania, 1 of periodic mania, 1 of chronic mania, 1 of acute dementia, 18 of dementia, 2 of dementia with epilepsy, 1 of mania with epilepsy, 11 of monomania, 2 of moral insanity, 11 of general paralysis, and 2 of congenital imbecility.

"Sub-arachnoid serous effusion was found in 47 cases: 3 of acute mania, 2 of chronic mania, 1 of periodic mania, 1 of acute dementia, 17 of dementia, 2 of dementia with epilepsy, 10 of monomania, 2 of moral insanity, and 9 of general paralysis.

"Sero-sanguinolent effusion into sac of arachnoid was found in 5 cases: 1 of chronic mania, 2 of dementia, 1 of dementia with epilepsy, and 1 of general paralysis.

"Sub-arachnoid sero-sanguinolent effusion occurred in 2 cases: 1 of mania with epilepsy, and one of dementia.

"The convolutions of cerebrum were noticed to be remarkably diminished in size in 4 cases: 1 of dementia, 1 of epilepsy with dementia, 1 of general paralysis, and 1 of congenital imbecility.

"Wasting of optic nerves and commissure occurred in one case of general paralysis.

"Paleness of the grey matter was noticed in 24 cases: 1 of acute mania, 1 of periodic mania, 1 of melancholia, 13 of dementia, 3 of monomania, 1 of moral insanity, 3 of general paralysis, and 1 of congenital imbecility.

"Grey matter was of a dark tint in 10 cases: 1 of mania with epilepsy, 1 of dementia, 2 of monomania, 6 of general paralysis.

"Grey matter of a violaceous tinge in 3 cases: 1 of chronic mania, and 2 of general paralysis.

"Grey matter was softened in 31 cases: 1 of acute mania, 2 of chronic mania, 1 of acute dementia, 10 of dementia, 5 of monomania, 1 of moral insanity, and 11 of general paralysis.

"White matter was softened in 16 cases: 7 of dementia, 1 of dementia with epilepsy, 5 of monomania, 3 of general paralysis.

"Serous effusion into lateral ventricles was found in 37 cases: 2 of acute mania, 1 of chronic mania, 1 of melancholia, 11 of dementia, 2 of dementia with epilepsy, 6 of monomania, 2 of moral insanity, 11 of general paralysis, and 1 of congenital imbecility.

"Sero-sanguinolent effusion into lateral ventricles occurred in 2 cases: 1 of acute mania, and 1 of mania with epilepsy.

"Foramen of Monro unusually large in 15 cases: 1 of acute mania, 1 of chronic mania, 3 of dementia, 1 of dementia with epilepsy, 4 of monomania, 1 of moral insanity, 3 of general paralysis, and 1 of congenital imbecility.

"Crystalline-like deposit in membrane of lateral ventricles was found in 8 cases: 1 of acute mania, 1 of chronic mania, and 6 of general paralysis.

"Cystic bodies in choroid plexuses occurred in 27 cases: 2 of acute mania, 1 of chronic mania, 1 of periodic mania, 8 of dementia, 1 of epilepsy with dementia, 1 of acute dementia, 6 of monomania, and 7 of general paralysis.

"Disorganisation of the right corpus striatum was found in a case of monomania.

"Pineal body was unusually large in 4 cases: 1 of chronic mania, 1 of mania with epilepsy, 2 of monomania.

"Absence of grit in pineal body in 19 cases: 1 of acute mania, 1 of chronic mania, 1 of mania with epilepsy, 1 of acute dementia, 6 of

dementia, 1 of melancholia, 2 of monomania, 1 of moral insanity, 4 of general paralysis, and 1 of congenital imbecility."

On the question of medical treatment Dr. Skae says:—

"In regard to treatment, I may repeat in general terms, that I have continued to derive the greatest amount of benefit in acute and recent cases, from the employment of the prolonged warm bath, accompanied by cold affusion on the head, in some instances the effects being almost sudden, and in not a few very rapid and permanent. The judicious use of opiates in another class of cases, and the removal, by appropriate remedies, of local affections in others, are the next sources from which the greatest amount of benefit from medical treatment has been derived. In a very large class of cases brought to the institution, the disease has supervened in persons of a scrofulous and feeble constitution, upon habits of over-exertion, combined often with insufficient nourishment, poverty, and anxiety; and in these a generous diet and a moderate allowance of stimulants have been found of great efficacy in the removal of the disease. The beneficial influence of a liberal diet, and a liberal allowance of malt liquors in the treatment of the insane, has been fully proved by the statistics of the various asylums throughout the empire, the proportion of recoveries bearing a very remarkable relation to the dietary and the amount of malt liquor comprised in it.

"In the treatment of patients, on the other hand, whose disease has been brought on by the excessive use of whisky, wine, opium, and other stimulants, I have not found in those cases where it has been adopted, any bad effect to result from the sudden and total cessation of their use, but, on the contrary, it appears to be the method ultimately most agreeable to the patients themselves, the complete suspension of the stimulants being followed within a very short time by a complete absence of the craving for them."

The "Thirty-fourth Annual Report of the Dundee Royal Asylum for 1854" contains the following statistics:—

"At the date of the last report there were 201 patients remaining in the asylum; there have been 41 admissions since—making the total number of patients during the year 242. Of these 25 have been discharged—19 of them cured, 4 improved, and 2 by desire; and 12 have been removed by death. The total number of patients, therefore, in the institution is 205. The daily average number throughout the year has been 204."

We are compelled for want of space to postpone our prepared analyses of the Perth, Kilkenny, Belfast, and North Wales Asylums. They all contain valuable statistical and general information to which we shall more particularly refer when analyzing their contents. Dr. Boisrogon's excellent "Report of the Cornwall County Lunatic Asylum" will also be noticed in our next number.

ART. II.—ON SECLUSION IN THE TREATMENT OF THE INSANE.*

IN our last number we gave an analysis of the answers to a circular issued last year by the Commissioners in Lunacy, addressed to the superintendents and medical proprietors of the principal lunatic asylums, and requesting information as to the employment or disuse of instrumental restraint and seclusion in the treatment of the insane, limiting our labours, however, to an elucidation of the practical working of the principle of absolute non-mechanical restraint in the treatment of the insane. Answers were sent by 117 medical attendants or superintendents, 72 of whom were in favour of a qualified use of mechanical restraint, 4 of restraint in surgical cases, 12 gave no opinion, and 29 advocated its total and unqualified abolition, or about 25 per cent. of the whole. The commissioners themselves agree with the large majority of practitioners in not adopting the extreme advocacy of an abstract principle, which the 29 just referred to adopt. They are of opinion "that the possibility of dispensing with mechanical coercion in the management of the insane is, in a vast majority of cases, a mere question of expense"—implying by their phraseology that there *are* exceptional cases—a small minority—to which it is applicable. We may therefore fairly conclude that the controversy as to the unqualified adoption of the abstract principle is now set at rest. Seclusion is substituted, to a large extent, for mechanical restraint, and must necessarily take its place in the controversy also. As to this, we apprehend that the commissioners do but re-echo the unanimous opinion of medical practitioners in stating that its occasional use for short periods, chiefly during paroxysms of epilepsy or violent mania, is generally considered beneficial. They add, however, "that the facilities which seclusion holds out to harsh or indolent attendants for getting rid of and neglecting troublesome patients under violent attacks of mania, instead of taking pains to soothe their irritated feelings, and work off their excitement by exercise and change of scene, render it liable to considerable abuse; and that, as a practice, it is open, though in a minor degree, to nearly the same objections which apply to the more stringent forms of mechanical restraint."

The great majority of the answers mention seclusion as being useful in a few exceptional cases, just as mechanical restraint has been found useful; but there are some who repudiate its use altogether, and some who specially plead in its favour. Dr. Bucknill (who is prominent among the latter) advocates the use of seclusion for two purposes—

* Report of the Commissioners in Lunacy.

first, as a remedial agent; secondly, as a means of coercion. As a remedy, he thinks that it should be made as "agreeable as possible." "The attendants should have the power to enforce seclusion only under the most pressing emergencies, for brief periods, and until the medical officer can arrive. Seclusion being a remedy, should be directed solely by the medical man, whose care it should be to abstract from it every primitive [?] characteristic. The easiest mode of doing this is to invest it with a medical character; to speak of it as necessary for health, and even to add some other remedy more purely medical." Dr. Bucknill has noticed *accidental* seclusion in bed (as for a sore leg) to be beneficial, and in a few cases this plan might be adopted; otherwise he recommends that it be practised either in the open air, in an airing court, or in light and cheerful sitting-rooms, furnished with the means of occupation and amusement.

"There is, however," Dr. Bucknill remarks, "another aspect under which seclusion must be considered, wherein it is not remedial, wherein it is acknowledged to be an evil, by its use being justified as the least of two evils, of which the annoyance and danger of the patients in general is the greater. It cannot be denied that insanity frequently displays itself by excitement of the malignant passions; and that some of the most depraved of mankind terminate their career in asylums. Towards these seclusion must occasionally be employed in its harsher form as a coercive means, to prevent the welfare of the many from being sacrificed to the passions of the few." In other words, mischievous and malignant inmates must be *placed in solitary confinement*—*emphatically*, in "seclusion in its harsher form."

Dr. Diamond, of the female division of the Surrey County Asylum, wholly repudiates the use of seclusion, and scatters all Dr. Bucknill's euphonisms and nice distinctions by the results of his experience. "Seclusion," he observes, "or solitary confinement of patients in a separate room against their will, I also much object to. I have no doubt cases may occur in which this may be requisite and beneficial, but they must be of rare occurrence. *I have not had a single patient* under seclusion during the past twelve months; and during the year 1852 it was used only in two instances for a period of nineteen hours in the whole. The discontinuance of seclusion has produced the greatest possible good; and I appeal to all who have visited the wards of this asylum to speak to the great quietness and industry which prevail throughout. I have now under my care patients who broke windows and committed all sorts of violence in order to be placed in seclusion, where they might rest in idleness, wrapped up with a rug in a corner of a cell for hours together, but who are now industrious persons, although their mental state is the same."

Now let us contrast this disuse of seclusion by Dr. Diamond with its use by others. First, as to Dr. Bucknill, its special advocate. "During the past year (1853)," he writes, "the total number of seclusions of female patients in the Devon Asylum has been 164, or rather more than an average of three a week. The average duration of all these instances of seclusion added together was eighteen hours and three minutes in each week. The average duration of each instance of seclusion was five hours and forty-four minutes. The average number of female patients was 260. The total number of male patients during the past year was 58, or rather more than an average of one in a week. The average duration of these seclusions was nine hours and twenty-five minutes in each week; and the average duration of each instance of seclusion was eight hours and twenty-five minutes. The average number of male patients was 200." It will be observed that the number of female patients under Dr. Diamond's care is just double that under Dr. Bucknill's.

Supposing, therefore, Dr. Bucknill had been placed in Dr. Diamond's place, his use of seclusion with the greater number would, as compared with that of the latter, be as follows:—

Dr. Bucknill's seclusions per annum	...	...	...	328
Dr. Diamond's seclusions per annum	...	...	...	0
Or, in time, Dr. Bucknill secluded for 11 weeks in 1853.				
" " Dr. Diamond—not for an hour!				

But if we take the two years, 1852, 1853, we might almost double these figures again.

These are enormous practical differences in the two methods of treatment; but are they so inexplicable as to warrant Dr. Diamond in asserting, that any person who would now use seclusion to the extent Dr. Bucknill has used it is unfit to have the superintendence of an asylum? Most decidedly not: for we do not believe that either mechanical restraint or seclusion has been so entirely disused in the Surrey Asylum as Dr. Diamond fondly believes. In venturing this assertion we do not intend or desire in the least degree to impugn that gentleman's veracity; we are satisfied that his statements are all made *bonâ fide*. We will state our reasons for our opinion. Finally, we have a large amount of evidence from perfectly trustworthy sources (Dr. Bucknill, for example) as to the *necessity* of seclusion in, at least, a few cases. Examples we subjoin.

Dr. Thurnam, of the Wilts County Asylum, remarks:—"The proportion of cases in which seclusion is resorted to is very small. Out of an average of 250 patients of both sexes, it is rare to have two cases under seclusion at the same time, or to have more than one or two instances during the week, and these *generally confined* to the *female* department."

Mr. Stevens, of St. Luke's, writes: "The amount of seclusion has also been very trifling during the past year, averaging two cases per week, and these for periods of a few hours only at a time. The patients so treated having been, from indecency of conduct, violence to others, or general turbulence of behaviour, entirely unfitted, for the time, for association with the other inmates."

So also Mr. Allen, of the Darneford Asylum: He secludes for mischievous destruction of everything within reach, extreme violence and assault, incessant shouting, blasphemous swearing, indecent and disgusting language—cases in which seclusion is used to attain Dr. Bucknill's second object—namely, *coercion* of the violent and depraved.

We could multiply quotations; but these suffice for our purpose, which is to show a concurrence with Dr. Bucknill, so far as this—that seclusion of a lunatic is occasionally absolutely necessary for the peace and comfort of the other inmates.

But, secondly, we do not believe that either mechanical restraint or seclusion has been so *entirely* disused in the Surrey County Asylum as Dr. Diamond states, for another reason—namely, that there is no evidence in support of the assertion. That gentleman, we venture to believe, eats and sleeps, and takes his recreation, like other superintendents; he is not, therefore, *always* in the wards of his establishment, nor is he, being mortal, ubiquitous. Yet, to gain even a hearing for his assertion that, during five years, in "not a single instance" of 800 cases under his care "has *any* restraint been used," he must first show that he was in *every* ward at *every* moment of the twenty-four hours for two entire years! Otherwise his statement is only made on hearsay evidence. Now, hearsay evidence is not admissible, except with much corroboration; hearsay *negative* evidence is inadmissible altogether.

Dr. Conolly has had too much experience of the tricks of attendants in asylums to believe all that he is told, or to venture on such an unqualified and wholly inadmissible assertion as Dr. Diamond has ventured upon.

Dr. Conolly wisely qualifies his evidence as to Hanwell thus: "No form of mechanical restraint was employed, *with my knowledge or sanction*, by night or by day;" but that it was used without his knowledge and sanction, and is often used in asylums, especially the overgrown county establishments, without the knowledge of the officers, is deducible enough from the following description of the supervision, and the conduct and character of the attendants of large asylums:—

Dr. Conolly states—"The supervision of the attendants in the *large* asylums is *almost always* inefficient. The female attendants do not often remain long enough in them to learn their duties; and in some of them they only learn to avoid trouble, by having recourse to mechanical

restraints in every difficulty. The male attendants usually retain their situations longer; but in consequence of the duties of a large asylum being generally too great in proportion to the medical staff, they know themselves to be for a considerable portion of the day free from observation; and they learn to baffle even the inspection to which they are subjected, by signals and other acts of confederacy, and in some cases establish an organized ruffianism which long escapes detection, and which some frightful outrage only at length reveals."

Dr. Diamond will do well to ponder these statements, and perhaps, when his perceptions have been quickened a little, he will discover that the females' division of the Surrey County Asylum is not the paradise he fondly imagines it to be.

A more important consideration remains, namely—that Dr. Diamond is wrong in principle—wholly wrong. Insanity comprises a group of diseases of the nervous system, more particularly of that portion in relation with sensorial stimuli. All medical experience as well as medical philosophy teaches that when these stimuli excite still more a morbidly excited and unduly active sensorium, they should be prevented reaching it as far as practicable. Hence the obvious and generally acknowledged advantage of seclusion in encephalic inflammations, in acute mania, in some forms of epilepsy, and in certain morbid transitory states of the nervous system, during which everything is a source of discomfort or irritation. We think it altogether incredible that amongst 520 female patients not a single instance of acute cerebral inflammation or of acute mania or of excessive irritability of the sensorial centres occurred during a whole twelvemonth, and it appears to us almost equally incredible that in such a case Dr. Diamond has not directed the best approved, most simple, and most effectual means of alleviation, namely seclusion. We will go further, and say that we are confident Dr. Diamond has often used this remedial agent, but under another name. In short, our conclusion is that both as to the use of mechanical restraint and seclusion the only difference between Dr. Diamond and others is as to the meaning of terms. This we gather, certainly, as to seclusion, from Dr. Diamond's use of the word "*cell*" in reference to it,—an obsolete word, that ought to be wholly banished from the literature of modern psychiatry.

But the question arises,* whether the seclusion practised by Dr. Bucknill was wholly necessary. It *seems* to have been excessive, but the excess may be only seeming. If a superintendent administer morphia, or any other preparation of opium largely, he may boast of his rare cases of mechanical restraint and seclusion, but he ought not to boast of his skill and judgment in the treatment. Or he may cure a refractory patient by the use of the cold bath or shower-bath, and

fairly boast that he never uses *mechanical* restraint, or seclusion; but if he pharisaically claim to be superior in benevolence and humanity to those who do use them when they think best for the patient, we have no hesitation in saying that the charge of inhumanity and cruelty rather rests upon him.

The treatment of the insane should differ as little as possible from that of the sane, when they are under *similar* circumstances of health or disease. If an opiate or other medicinal sedative be indicated, by all means let it be administered; if the shower-bath be thought advisable, use it; if isolation from stimuli be beneficial, place the patient, without hesitation, in seclusion; if deliriously moving hands and feet are mischievous, do not hesitate in restraining them by any benevolently appropriate means; but above all let not the medical practitioner, from any foolish fear of incurring censure or obloquy, restrain his own freedom of action, or the freedom of action of his brethren, by the dogmatic and intolerant enunciation of abstract principles. Such conduct is subversive of all independent manly thought, and will inevitably bring on those who adopt it the imputation of cant, humbug, bigotry—things discreditable to the noble art of physic.

ART. III.—ON EPILEPSY.*

THE most accurate exponent of the advance of science is ever to be sought in the extent to which it is applicable to the true interests of man; in the extent to which it promotes *wisdom*, as distinguished from mere *knowledge*, and in the amount of its applicability rather to the wants of man, than to the gratification of his curiosity. In the infancy of any *science*, facts are imperfectly observed, loosely described, and their significance misunderstood; they appear as a chaos of phenomena, unconnected, or but very feebly connected, by hypothesis; and it is only when their true bearing and mutual connexion and dependence being clearly perceived, they become constantly recurring illustrations of one grand principle, that the parent *science* becomes worthy of its name. Casual observation, wonder, hypothesis, mystery, over-appreciation, and neglect, are a few only of the preliminary phases through which truth has to pass, before obtaining its proper recognition, and paying its proper quota to the service of mankind.

These remarks are suggested by a perusal of the works before us, where we find the three sciences of Physiology, Electricity, and Statistics, applied to the elucidation of the phenomena of a disease, which,

* Epilepsy and the Allied Affections. By Charles Bland Radcliffe, M.D. London: John Churchill.

Du Prognostic et du Traitement Curatif de l'Epilepsie. Par Th. Herpin. Paris: Baillière.

if not one of the most fearful scourges of *the race*, is certainly one of the most formidable and incomprehensible which can attack the individual, whether viewed in reference to its immediate invasion, or its ulterior consequences.

These branches of knowledge have not been exempt from the various phases of opinion already alluded to. When Harvey discovered the circulation of the blood, it appeared to those of sanguine and hopeful temperament that now a sure and certain method of curing all manner of disease was, or would speedily be, indicated. This was the stage of over-appreciation; it passed by a natural transition, through disappointment, to neglect. And so has it been with regard to physiological discoveries in general, till the science, instead of serving as the true foundation for distinguishing and treating disease, has but too frequently been prostituted to the co-ordinating of theories, or the justification of a foregone conclusion. Electricity was long the plaything of the child, the toy of the philosopher; it is now the potent analyser of mysterious compounds, the vehicle of a nation's thought; and combined with physiological reasoning, we find it in the hands of Dr. Radcliffe, applied as a powerful calculus to the hitherto crude and incongruous mass of facts and opinions, bearing upon muscular action in general, and epileptic convulsions in particular. Statistics have been alternately the weapon, the jest, and the shield of the statesman; yet, carefully and properly applied to the investigation of this disease by M. Herpin, we shall find it lead to many useful and interesting results, as regards its prognosis and treatment.

Taking these two works as our text, and availing ourselves of other sources of information, where it may appear necessary, we shall proceed to examine what is the present state of our knowledge, and what are our future prospects in reference to this interesting and fearful disease.

For facilitating this investigation, we propose to ourselves the following subjects of inquiry:—

1. What are the phenomena of epilepsy?
2. What are its varieties?
3. What is its general pathology?
4. What are the conditions favouring the development of the epileptic tendency?
5. What are the influences presiding over periodicity?
6. What place in the natural history of disease can we assign to epilepsy?
7. How is epilepsy distinguished from other diseases?
8. What is our prognosis, generally, and in any individual case?
9. What is the proper and rational treatment of epilepsy?

I. *What are the phenomena of Epilepsy?*—There are two distinct forms in which the *fit* of epilepsy appears—the epileptic convulsion, and the epileptic vertigo; the *grand mal* and the *petit mal* of the French writers. The general characters are—loss or great diminution of consciousness, generally with convulsion, but occasionally with extreme relaxation, always with great modification of the muscular system; oppression and embarrassment of the respiratory and circulatory functions; the attack lasting from a few seconds to many hours, terminating very frequently, if not *usually*, in a state of apparent health; recurring sometimes not at all, but most frequently at intervals, not usually marked by any regularity, though this is subject to exceptions. We extract Dr. Radcliffe's vivid portrait of the epileptic convulsion entire:—

“The fit is ushered in by a cry or scream, and the patient is at once dashed to the ground. The whole frame is seized with violent and frightful convulsions, the features are horribly drawn, the head is twisted to one side, the eyes are distorted and half protruded from their sockets, the teeth are gnashed together, and the tongue is mangled between them until the mouth overflows with bloody foam, the limbs are dashed about violently, the chest is so fixed that all proper respiration is at an end, and, last of all, the bladder, intestines, and seminal vesicles participate in the spasm and expel their contents. The temperature of the skin is usually below the natural standard, and the hands and feet are cool or actually cold; but, in the course of the paroxysm, and as the asphyxial symptoms gain ground, the head and neck become warm and tumid, the tumidity rapidly increases, and the colour changes from dull red to deep blue or black. In a less degree this change extends to the rest of the body, but, as a general rule, the hands and feet remain cool and pale throughout, or only acquire a slight venous or bluish tinge. The pulse rapidly becomes insensible, or nearly so, though the heart beats with tumultuous violence. There is no consciousness whatever, and the most violent stimulants fail to rouse the dormant senses. For some time after the violence of the fit is over, the limbs are shaken by passing quivers, and the breathing interrupted by sobs or gasps, but at length these residuary troubles end in a state of comatose sleep, in which the breathing is often loud and stertorous. Then the lungs resume their natural action, and, consequent upon this change, the veins of the head and neck become unloaded, the colour and pulse return, and the patient awakens to an obscure and troubled consciousness.”—*Epilepsy and Allied Diseases*, pp. 49—51.

The less formidable attack, in appearance at least, is without convulsion, turgescence of face, or foaming of the mouth. There is sudden loss, or great diminution and embarrassment of the consciousness, relaxation of the muscular system, tottering, staggering, or falling; a cold clammy skin, a feeble pulse, and, in many cases, an almost imme-

diate return of the faculties. Still milder forms than this are described, and, indeed, in the confirmed epileptic we meet with every variety of attack, from the simple vertigo, which lasts but an almost inappreciable moment, to the violent and long-continued convulsion above described. Some patients are only affected by the vertigo, and never have the convulsion; yet we cannot consider their cases as less serious than the others, for we have the high authority of M. Foville for asserting that intellectual degradation occurs more constantly and more quickly amongst those affected by vertigo, or *petit mal*, than amongst those who have *only* the convulsions, or *grand mal*. Most frequently, however, the forms are found combined in the same individual. In sixty-eight cases mentioned by M. Herpin, there were only five where vertigo existed alone.

Most frequently these attacks, whether of vertigo or convulsion, take place without warning. In a few instances there are distinct premonitory signs, which may be taken advantage of by the sufferer. Thus, Dr. Radcliffe observes, that, "on the eve of a fit, confirmed epileptics are noticed to sit or move about in a moping and listless manner;" to complain of chills and shiverings, or of faintness and sickness. "The respiration is interrupted by frequent sighs; the pulse is weak, irregular, and slow." Occasionally there is headache, dazzling of the eyes, singing in the ears, and other excitements of sensation; slight flushing of the face, dilatation of the pupils, and extreme irritability of temper. In some rare instances, there is, immediately before, or at the commencement of, the attack, a phenomenon of a more specific nature. For the following description we are indebted to M. Foville. "A peculiar sensation, it may be of cold, pain, heat, or itching, is developed suddenly in a toe, a finger, a limb, in the belly or the back, and from the point whence it originates, mounts gradually to the head; it arrives there, and immediately the patient falls (as if struck); the convulsions break forth at once." This sensation has received, from the earliest times, the name of *aura epileptica*. It is rare; so much so, that by many its existence is doubted or ignored, and by others, explained in a different manner. Thus, M. Herpin considers it as nothing more than the commencement of the tonic spasm of the muscles of the limb. This view can scarcely be admitted; we know that modifications of sensation do frequently precede an attack; and in an affection where sensibility and motility are equally affected, it seems but reasonable to suppose that the attack may be heralded sometimes by changes in the one class of nerves, and sometimes in the other. For an interesting *résumé* of the various phenomena of a sensor, motor, or psychical character, which occasionally precede the attack of epilepsy, we refer our readers to Romberg's treatise on

"Diseases of the Nervous System," article—Epilepsy, and to the article—Epilepsie, in the "*Diet. des Sciences Medicales*," by M. Esquirol.

Of the frequency of the occurrence of premonitory signs in general, very different accounts are given by various authors. Dr. Radcliffe considers them nearly constantly to be observed; Professor Romberg notices them in about one half of his patients; M. Herpin states the proportion to be about one-fourth; M. Georget states that not more than four or five per cent. of those attacked with an epileptic seizure have any premonition; M. Beau gives the proportion of seventeen per cent.; M. Foville, M. Esquirol, and Dr. Cheyne give no numerical ratio, but state that in much the greater number of cases there are no precursory symptoms. We believe, however, that careful observation would most frequently detect some changes in the system, analogous to those above described.

Though there be this difference of opinion concerning the outset of the attack, there is but little doubt as to the results. Except in the very slightest seizures, and in the epileptic vertigo, the fit always leaves behind it some sequelæ, such as headache, drowsiness, pain in the limbs, stiffness and soreness of the whole body, pain in the back of the neck, swollen and bitten tongue, ecchymoses, and bruises. These all appear to be the natural results of the attack, produced chiefly mechanically. But there are other effects, more serious in character, and more insidious in their invasion. Death but rarely occurs in the fit; after a day or two, however severe the attack, the patient appears in his usual health; but, by-and-by, another and another fit supervenes, and the nervous centres begin to suffer, and not to recover their due functions in the intervals. The features alter and become ugly (Esquirol); the limbs become gradually emancipated from the control of the will; hemiplegia often occurs; the memory becomes feeble; and we observe in the intervals a diminution of the intelligence, which, gradually augmented, brings on at length a state of confirmed dementia. These fearful results have been known to occur after one fit (Esquirol) in children, but this is not usual. On the other hand, we have known many epileptics whose intellect has not appeared to suffer in the least by attacks, severe, long-continued, and of many years' duration. Dr. Cheyne gives similar instances, (article—Epilepsy; "*Cyclopædia of Practical Medicine*.") Yet we may take it for granted as a general rule, that such severe functional derangements, even if in the beginning they be no more than functional, cannot continue long without leading to serious organic mischief, and deterioration of the mental faculties in the great majority of cases.

A few words on some of the individual symptoms will conclude our remarks on the phenomena of epilepsy.

The premonitory symptoms are evidently due to modifications of innervation, and of the circulation in the nervous centres, or to disorder of the particular organ or viscus in which the exciting cause of the convulsion is situated. The "aura" may sometimes be the commencement of spasm, but more frequently we believe it to be indicative of a change in the nervous centres themselves, and to be strictly a reflected sensation, a central impression. The scream with which the attack is ushered in is one of the most fearful sounds in nature. Many accounts are given, some ludicrous, and some very melancholy, of the effects produced upon excitable persons hearing it,—its nature is not well understood. That it is not indicative of pain or fear, at least in all instances, is capable of clear demonstration. We are well acquainted with an epileptic patient who screams dreadfully on the attack, and who has frequently described to us the sensation of the invasion as *most delightful*, and this though dreading the attack to the utmost extent. He says that he hears sounds and sees colours all of the most beautiful character, but cannot clearly satisfy himself at the time *which is sound and which is colour*,—

"The hues seemed music, and the music, hues."

He has no sensation of pain whatever. All writers concur in affording illustration of the same principle. The noise is most probably produced by the first convulsive action of the chest, together with that of the larynx.

The convulsion is partly *tonic*, though chiefly *clonic*, (the existence of the former may often be traced even during the most violent prevalence of the latter;) it may be general, more frequently it is partial; it may be wanting altogether, as in the vertiginous form, and many varieties of the *petit mal*. The *fall* generally precedes the convulsion, but in some instances follows it, as in a case cited by Esquirol. The embarrassment of the respiratory function is, we believe, correctly attributed by Dr. Radcliffe to the spasmodic fixtured of the parietes of the chest; but at the same time it appears that changes take place in the organs themselves, as evidenced by the increased secretion of mucus in the trachea. The loss of sensibility appears to be simultaneous in its invasion with the convulsion and fall. It is generally complete, but not invariably.

It is a strange and suggestive fact, that whilst those diseases which are obscure and variable in their symptoms, proteiform in their manifestations, insidious in their invasion, and of difficult diagnosis, have been discovered, hunted to their homes, and traced to their proximate cause—epilepsy, which has not varied in its phenomena since the days of Hippocrates, which is easy of recognition, plain and palpable in its attack and its results, still remains one of the *opprobria medicinæ*. It is

interesting, as an illustration of the constancy of this disease, to compare the account given by the great father of medicine with that which we have given above. He says—

“The patient loses his speech (and intellect), and chokes, and foam issues by the mouth; the teeth are fixed, the hands are contracted, the eyes distorted; he becomes insensible, and in some cases the bowels are evacuated. He kicks with his feet . . . and these symptoms occur sometimes on the left side, sometimes on the right, and sometimes on both.” Aretæus and Paulus Ægineta give similar or identical accounts.

Such, constant and well marked, have been the symptoms of this disease since the days of Hippocrates; and yet it would appear that no step has been taken in the meantime, tending to the discovery of its real cause and essential nature. But nature cannot be ever obdurate to the patient observer of her phenomena, and we hope to indicate shortly, that an advance is being made in the right direction.

II. *The Varieties of Epilepsy.*—A very natural division of the subject has always suggested itself to systematic writers on this disease—viz., into E. Cerebralis and E. Sympathetica, according as the root of the disease was supposed to be in the brain or in some distant organ. We prefer the terms E. Centrica, and E. Excentrica, the division being essentially the same, but the expression more comprehensive, as including in the former not only the brain, but the spinal cord. The second grand division has again been subdivided into various classes, taking their names from the special organ supposed to be affected, as E. Stomachica, E. Hepatica, E. Nervosa, E. Uterina, E. a Dolore (Dr. Cheyne). We venture, however, to suggest that, in a nosological point of view, these divisions are unnecessary and uninteresting; though, as affecting the treatment, their recognition is important; but, considered as a disease simply, the manifestations are alike in all these cases, and, therefore, not requiring separate description. The preliminary symptoms, however, will sometimes differ, obviously in accordance with the derangement of these special functions, and this will be of essential service in the treatment.

III. *The Pathology of Epilepsy.*—The most cursory view of the subject leads us at once to the nervous centres as the source of, or agent in, the production of these strange phenomena; but having arrived there, we seem as far from the truth, practically, as ever. Is it a disease of nervous excitement? Why, then, is consciousness destroyed or suspended?—Is it one of depression? Why, then, is muscular action so violently increased?—What is the condition of the brain on the eve of, and during an attack of epilepsy? Is it congestion? Why, then, do the symptoms *decrease* when the congestion is on the increase

towards the close of the fit?—Is it inflammation? This is obviously incredible, from the very transient nature of the attack. These are important questions, and deserve the most serious consideration. An answer to them is found in Dr. Radcliffe's work, marked by such originality of thought, and such earnest research into the phenomena, that we cannot resist laying it, at some length, before our readers. And in order to do this, it will be necessary to enter into our author's views on the subject of muscular contraction in general, as, without this, his pathology of epilepsy would not be comprehensible.

At p. 41 we find the following law stated, which contains a most remarkable deviation from the received views of muscular motion, but which is the basis of Dr. Radcliffe's account of the pathology of epilepsy and all allied convulsive affections:—

“ALL STIMULANTS, VITAL AND PHYSICAL, ANTAGONIZE MUSCULAR CONTRACTION, AND CONTRACTION HAPPENS FROM ORDINARY MOLECULAR ATTRACTION, WHEN THE MUSCLE IS NOT STIMULATED.”

This opinion our author founds upon a great number of facts and experiments, of which the following is an abstract:—

1. Rigor mortis (analogous to ordinary muscular contraction) occurs after all stimulus has ceased. It may be proper to mention that “stimulus” includes the sum of the influences brought to bear upon muscle, such as innervation, blood, temperature, and the like. Rigor mortis, then, only occurs on the cessation of “stimulus.”

2. The dactos contracts on the application of cold, which is but the abstraction of the stimulus of heat; the skin under the same circumstances shrivels.

3. “Comparing voluntary and involuntary muscles, their contractibility is found to be related, in an inverse ratio, to the supply of nerves (p. 7), and to the supply of blood (p. 8),” and convulsion occurs on bleeding an animal to death at the shambles. Also rigor mortis may be relaxed by the injection of warm blood into the vessels.

4. The argument adduced from mechanical irritation as inducing contraction, and from the action of the hollow viscera, as the uterus and bladder upon their contents, does not admit of condensation. We must refer our readers to the work itself, pp. 8 to 11.

5. The testimony which electrical phenomena bear to this view are very closely investigated and clearly stated. The result of them is, that an electrical current exists in a muscle *during rest*, and ceases altogether during contraction, the needle of the galvanometer at such times pointing to zero, as it does also in cadaveric rigidity. It also appears from these experiments, that artificial electric currents pro-

duce contraction in a limb, by *neutralizing* the already-existing natural current.

6. From the action of cold and heat upon the animal tissues, it appears that the former always produces contraction, and the latter relaxation.

7. The condition of the bloodvessels, under various circumstances, affords, according to our author's view, further corroboration of the law. Thus, "joy flushes the skin, and fear blanches it; in other words, the superficial capillaries expand when the nervous energy is exuberant, and shrink when it is deficient." (p. 25.) In inflammation and various pathological states of the system, there are other illustrations of the same principle. This question is still more fully discussed in a previous work by the same author, on "Vital Motion."

8. It is impossible to condense the argument deduced from the action of the heart, so as at once to make it comprehensible, and bring it within our limits. We can but state the result arrived at, viz., that the diastole of the ventricle is the *active state*, and is synchronous with the greatest innervation, and the most free supply of blood to the vessels of the heart; that the contraction is a passive state, synchronous with the diminution of innervation, and consequent upon that and the diminished supply of blood. This our author supposes also to furnish a solution of the mystery of the rhythmical action of the heart; but for the full illustration of this part of the subject, we can but refer to Chapter 3, which contains many interesting and suggestive remarks, and which concludes thus:—

"The doctrine, then, that all stimulants, vital and physical, antagonize muscular contraction, and that contraction happens from ordinary molecular attraction when the muscle is not stimulated, may be said to receive its final physiological confirmation in the physical explanation which it affords to the three great and fundamental problems in physiology,—muscular contraction, the movements of the blood in vessels independently of the heart, and the rhythm of the heart. And hence the necessity for the full investigation of the law of muscular contraction, before entering upon the investigation of epilepsy, and other disorders, in which muscular contraction is in excess; for if the old doctrine that muscular contraction is the result of stimulation must fall to the ground, then all pathological deductions founded upon that doctrine must fall along with it."

To complete the physiological view of this question, it is incumbent upon us to allude to those phenomena which appear to militate against this view, or which at least require further elucidation, before they can be deemed illustrations of the same general law.

1. The phenomena of muscular contraction differ in many respects from molecular attraction,—in its sudden occurrence, in the absence,

or almost absence, of diminution in the absolute bulk of the muscle,—in its great lessening of length, and great increase in breadth and thickness.

2. In diseases of deficient innervation and circulation, as in chlorotic, anæmic, and syncopoid states, muscular contractility and tonicity are low, and only as exceptions become spasmodic.

3. In cases where, from injury or disease, the nervous energy is abstracted, as in paralysis, or the division of a nerve, the *rule* is, muscular relaxation.

4. The phenomena of rigor mortis do not occur at once, sometimes not for hours after the cessation of life, and the consequent abstraction of stimulus.

5. It appears from general testimony that convulsion may occur from plethora, as well as from anæmia, as Esquirol observes, that it is in accordance with many facts, that Hippocrates and all subsequent observers have regarded plethora as one of the causes of epilepsy.

These and similar facts may serve to indicate the class of phenomena which do not appear subservient to the same law. We do not doubt, however, that so acute a physiologist as Dr. Radcliffe has foreseen and provided against these apparent objections,—indeed, some of them are urged by himself; but until further explanation of them is afforded, we must allow the question to remain *sub judice*,—a more full discussion of the subject would lead us too far from our purpose at present.

In the meantime, adopting these physiological views, we are now prepared to understand our author's pathological opinions on the nature of epilepsy and convulsion in general. Commencing the investigation by interrogating the three great systems, the vascular, the nervous, and the muscular, he finds that in each there is a depression of proper power, the circulation low, the system “unnerved,” and the muscular system indicating want of tone and energy, all which is clearly demonstrated.

“Viewed in this manner, the vascular and nervous systems of the epileptic, as well as the mobile structures in which the convulsive phenomena are manifested, are seen to present unequivocal evidences of inactivity; and this inactivity—so far, at least, as the vascular and nervous systems are concerned—is found to be most marked in the fit itself.”

“It is, then, sufficiently evident that epilepsy cannot be caused by any excitement of the muscles, consequent upon the excessive supply of nervous or any other stimulus. On the contrary, everything is in harmony with the physiological premises, and, as might be anticipated from these premises, the convulsion would seem to depend upon *want* of vital stimulation, which want had allowed the molecular attraction of the muscles to come into play, and gain the ascendancy.”—*Epilepsy*, pp. 59—61.

In that part of the work which is devoted to the affections allied to epilepsy, and marked by convulsion, tremor, or spasm, we find still ampler confirmation of these views; but as it is our intention to confine our remarks chiefly to epilepsy itself, we must leave these for some future occasion. Having, then, got a clear and definite statement of the general pathological condition of the system, we are prepared to enter upon our next question:—

IV. *The Conditions favourable or conducive to the Development of the Epileptic tendency.*—In answering this question, we shall take advantage of M. Herpin's division of the subject, and examine successively,—

1. Hereditary tendencies.
2. Anatomical conditions.
3. Physiological conditions.
4. Hygienic conditions.
5. Morbid antecedents.

1. It is generally acknowledged that the tendency to epilepsy is hereditary, not *always* in the direct line of ancestry, but either so, or in collateral branches; thus Boerhaave observes:—“*Silente sæpe morbo in genitore, dum ex avo derivatur in nepotem.*” General as this admission is, the statistics are rare by which its absolute frequency could be determined. M. Herpin gives us the particulars of 68 cases, with all the information which could be gathered as to the family affections. The result is interesting, not only as showing absolutely that this class of affections is hereditary, but as indicating those diseases which seem most closely allied to it. Thus he found 11 cases of epilepsy, 24 of mental alienation, 11 of apoplexy with hemiplegia, 13 of chronic meningitis and hydrocephalus, 2 of general paralysis, besides a few isolated instances of suicide, melancholia, &c., and 1 of softening of the brain. Some of these affections were found in more members than one of the same family, so that part of the 68 cases might appear free from the hereditary tendency; but it must be remembered that there are very great difficulties in the way of ascertaining these facts, and that it is more than probable that, could everything relating to the antecedents of an epileptic be known, the instances where the disease appears unpreceded by any of these, its allies, would be very rare. Dr. Cheyne, indeed, considers that it never originates in a family except by exaltation of the strumous diathesis, through intermarriage, or some accidental cause. To this we shall have to refer again.

2. The anatomical conditions which appear to favour the development of epilepsy are various and doubtful, and from their frequent absence and want of constancy, throw but little light upon the nature of the disease. In an epileptic who has had but few attacks, whose

intellects or muscular powers have not permanently suffered, and who has died from accident or from some other disease, a *post-mortem* investigation will probably reveal no lesion whatever of the nervous centres, or, as M. Foville observes, "We may, perchance, meet with a tubercle, a cancer, an osteo-calcareous production, which may be regarded as the occasional cause of the disorder; but the disorder has disappeared, *the tubercle still remaining, and no symptom betraying its presence.*" According to the investigations of the Wenzels, the most frequent alteration is found in the pineal body, and they supposed this to be always the case in centric epilepsy. In those who die during an attack, the most constant appearances are those of congestion and extreme gorging of the vessels, but this, as Dr. Radcliffe observes, is evidently due to the action of the fit and to the manner of death. In old, confirmed cases, besides these appearances, we find marks as of the effects of long-continued modifications of the circulation, as induration, or sometimes softening of the white matter, changes in the appearance, also, of the grey substance, and almost always enlargement of the vessels of the brain. Of the special alterations of structure we cannot speak, but must for details refer to systematic works on the subject. Suffice it to say, that all imaginable morbid conditions have been met with, but can scarcely be considered as the causes of the disease, inasmuch as they exist when the disease itself is not actively manifested; and the disease frequently exists with equal or greater virulence when no such changes are to be met with. The same observation applies with still greater force to those anatomical conditions in various organs, which are found in epilepsy originating in irritation at the distal extremity of nerves, in what we have called "excentric epilepsy."

3. *Physiological conditions.*—Amongst these we have, perhaps rather irregularly, included *sex*. It appears, from reports of hospitals, that females are much more frequently affected than males. M. Herpin gives the proportion as 6 to 5; Frank, of 8 to 7. Esquirol mentions, that in the *Salpêtrière* there are 389 women, and at the *Bicêtre* 162 men, in 1813. Georget states, that in 1820, the relative numbers were 324 and 160. *Age* appears to have a material influence in predisposing to epilepsy. From various documents by Leuret and others, it appears that nearly 70 per cent. are attacked before the age of 20. Real congenital epilepsy is very rare, not occurring in more than 1 per cent. One-fourth appear to be attacked before 5 years old; from 5 to 10, not more than 3 per cent. occur; from 10 to 15, and from 15 to 20 years, about one-fifth each. With regard to the after ages, the conclusions appear not sufficiently ascertained. The influence of temperament, of dentition, and of the establishment of menstruation, has yet to be determined. They appear to be small, though this is not in

accordance with the popular impression. The *recurrence* of the function of menstruation, however, may frequently be an exciting cause in those otherwise predisposed to the affection. The proportion of married epileptics is very small compared to the unmarried; but this is no etiological indication, as cause and effect here mutually react.

4. *Hygienic conditions*.—We have no accurate means of judging of the proportion of epileptics among the rich and the poor. Hospital practice gives no assistance—private practice is not a correct test; but out of M. Herpin's 68 cases, 21 belonged to rich families, and 26 to workmen in comfortable circumstances. Of the rest, only 11 were in positive indigence. It needs little proof that excess of various kinds—drunkenness, gluttony, and excessive intellectual occupation, having a tendency to the general depression of the powers—tends to favour the epileptic condition. We have no account of moral causes, except as they act as *exciting* causes.

5. The morbid antecedents which have been observed in patients afterwards epileptic are often of a tubercular nature. Besides which we notice mental alienation, hydrocephalus, infantile convulsions, chorea, hysteria, nightmare, and somnambulism.

The exciting or accidental causes are innumerable—strong impressions on the senses, as pain, startling sounds, flashes of lightning; mental emotions, chiefly those of a depressing nature, but sometimes the contrary—fright, grief, extreme fatigue, anger, drunkenness, self-abuse. The excentric epilepsy may be brought on by anything tending to the derangement of its particular seat, as an overloaded stomach, an engorged liver, an irritated uterus, a calculus in the pelvis of the kidney, or the like.

Certain circumstances favour or impede the operation of the accidental cause upon the constitutional tendency. Among these are the season of the year and the time of day. In accordance with Dr. Radcliffe's pathological views, cold seasons seem to be about twice as favourable to the development of the attack, as warm ones. There seems to be a difference of opinion as to the relative frequency of attacks in the day and in the night. Dr. Radcliffe and Leuret consider that the fits happen most frequently by night. M. Beau gives an equal proportion. M. Herpin decides that, though the most violent attacks occur by night, the numerical majority is in favour of the day very decidedly. Thus, in 56 cases, the attacks occurred nearly always in the day in 42, nearly always in the night in 11, and equally by day and night in 3. To complete this subject, though not strictly in place here, we may add, that epilepsy is essentially a chronic complaint, and may last any length of time within the ordinary limits of life, though, of course, with a tendency to shorten it; and that its

attacks may occur at any intervals, from a few minutes, to months, or even years. There is occasionally, especially in old confirmed cases, a periodicity, but usually this is wanting, or extremely irregular. But this belongs to our next question.

V. *The Influences which preside over these and similar Phenomena.*—In answering this question, we are tempted to make very liberal extracts from Dr. Radcliffe's third chapter on Periodicity, as well to give an example of the pleasing style in which the work is written, as to afford us the required information. The illustrations used are the sensitive plant and the newt.

"The periodical changes in the life of the sensitive plant are both plain and simple. In spring the seedling emerges from the cradle in which it had slept during the winter; in summer it puts forth its foliage; in autumn it droops; in winter it dies. In spring it gives new signs of life; in summer it regains its verdure; in autumn it fades; and in winter it again becomes a bare and lifeless twig. Year by year these phenomena succeed each other with unfailing regularity, and the vitality ebbs and flows in direct relation to the ebbing and flowing intensity of the sunbeams.

"At daybreak also the leaves recover from the closed and pendant condition in which they have been all night, and—if not disturbed in any way—they remain erect and unfolded until evening, when they again close and droop; and these changes alternate with perfect regularity, so long as the leaves retain their characteristic irritability. In each case the vital movement corresponds with certain changes in the relative positions of the earth and sun; the one referring to the annual, the other to the diurnal revolution.

"The periodical changes in the life of the newt are not less plain and simple than those which occur in the life of the sensitive plant. The egg, like the seed, exhibits no sign of development, except it be quickened by the sunbeams, and the animal, like the plant, continues dependent upon the same fostering aid, throughout the whole course of its future life. As spring advances it grows day by day into a more active and sentient being; as autumn wanes it droops by degrees into a state of unbroken sleep. This winter slumber passes off at the renewal of spring, and returns at the end of autumn. . . . In the active period of its existence also the newt wakes in the day-time, and sleeps during the night. In a word, the life of this creature appears to be as closely wedded to the sun as that of the sensitive plant, and yet that life embraces a sentient principle, which is endowed with memory and other mysterious gifts.

"The diurnal changes in the life of the newt are reflected also by diurnal changes in the lives of other animals. Sleep still attends upon night, and wakefulness upon the day. At sunset the butterfly descends from the sky, the snail withdraws within her shell, the dace lies motionless in the pool, the frog ceases to leap across the path, the lark folds his wing and hushes his song, the deer retires to his lair,

and sleep reigns over them during the night; but when the dawn illumines the east, the spell is broken, and all are released to life and enjoyment until the evening."

All this is no less philosophical in conception than beautiful in expression. In pursuing the subject the author shows how all vital activity is dependent upon, or closely related to, the amount of light and heat. He shows also, quoting Humboldt's eloquent account of the nocturnal life of animals, how the light of the moon has a similar influence to that of the sun, though in a less degree, and also that artificial light and heat have somewhat the same effects as the natural agents. It is then shown how, in the life and functions of man, there are distinct evidences of periodical action, and then we find this application of the doctrine to epilepsy:—

"It may be expected that the signs of periodicity will always be masked and obscure in man, but that they will be manifested most distinctly in him who is deprived of that active inherent life, which constitutes the badge of distinction between man and the plant, and not in the person who is acted upon by inflammation, or who is excited in any other way. And so it is.

"There can be no doubt as to the obscurity of the evidences of periodicity, even where that obscurity is least, as in epilepsy and the allied affections; but there can also be no doubt as to the existence of these evidences. Thus, on looking at a number of cases, it is found that convulsion and spasm occur more frequently at night than in the day; more frequently about the time of new moon than the time of full moon, and more frequently in the winter than in the summer months. Of these evidences of diurnal, monthly, and annual periodicity, the diurnal are the most frequent and the best established; but all are sufficiently frequent and obvious. And in this point of view the signs of periodicity become only so many additional evidences of that constitutional want of innate strength which appears to be the prominent fact in the pathology of epilepsy and the cognate disorders."—Epilepsy, p. 118—120.

It must, however, be acknowledged that as yet no general law of recurrence has been discovered to which epilepsy is amenable; and if the "formula of determination" be ever announced, it will of necessity contain so many "variable unknown quantities" as to render it nearly, if not altogether insusceptible of investigation in reference to individual instances. We have next to inquire—

VI. *What place in the natural history of disease does epilepsy claim?*—It is evident from what has been stated as to the morbid anatomy of this affection, that there are no changes sufficiently constant in the nervous centres to allow epilepsy a place in any anatomical classification of disease whatever. It is by its physiological relations that its true locality must be determined.

Epilepsy has generally been classed, apparently without doubt or

misgiving, amongst the convulsive affections; yet, we think that a careful consideration of the phenomena will make its claim to this position appear less clear, notwithstanding that convulsion is so very frequent an attendant or *symptom*. We do not consider irritation of the neck of the bladder, or of the uterus, or dentition, or menstruation, as convulsive affections, on the grounds that convulsions frequently accompany these states. Passing slightly over the obvious difference between the *acute* nature of convulsions generally, and the *essentially chronic* nature of epilepsy, we have to notice the very important fact, that *spasmodic muscular action, though a frequent, is by no means a constant attendant upon epilepsy*. In the epileptic vertigo and many forms of the *petit mal* the convulsion is entirely or chiefly wanting, and in its place is a total and extreme relaxation of the whole muscular system. And these must not be considered as slight and imperfect attacks, for it is important to bear in mind that such patients as are affected with epileptic vertigo alone, are more rapidly and more constantly deteriorated in their intellectual functions than those in whom convulsion is prominent. It may be said that, even in these cases, there is some degree of convulsion, but surely so small an amount of any action as that which is imperceptible can scarcely be sufficient to characterize a disease. We saw very recently an epileptic attack which lasted above twenty-four hours, where the whole muscular system was in a state of the most complete relaxation, and the most careful investigation failed to discover any indications of spasm. That these and similar cases are *truly* epileptic, the history, connexions, and general symptoms sufficiently prove. If this be so, we conceive that epilepsy has no claim to be considered essentially a convulsive affection. The one constant symptom is, loss (or great diminution or embarrassment) of consciousness, accompanied with considerable *modification* of the muscular system.

What, then, is the position of this disease nosologically? We pass over all those opinions as untenable, which connect it with inflammation of the white matter of the brain, with alterations in the pineal body, or with any constant change whatever. Dr. Cheyne writes thus:—

“We conceive that epilepsy is as certain a manifestation of the strumous diathesis as tubercular consumption, psoas abscess, hereditary insanity, or certain congenital malformations or defects of organization, which are inherited only from serofulous parents. We have no recollection of a case of cerebral epilepsy in a patient, who, when due inquiry was made, did not appear to inherit a strong disposition to serofula.”—“Cyclopædia of Practical Medicine,” article—Epilepsy.

This appears a very probable hypothesis, but by way of further in-

dicating the connexions of epilepsy, we will refer once more to its ultimate phenomena. A person, apparently in good health, is seized with an epileptic fit; in a few hours or a few days at most he is in perfect health again. After an interval more or less prolonged the attack returns, and again and again departs, leaving no particular alteration behind in any of the functions. But, by degrees more or less insidious, a change is observed, perhaps first in the memory, perhaps in the motor functions, gradually augmenting till it terminates in mental alienation and paralysis, perfect or imperfect, and, finally, in death. Mental alienation, as a result of epilepsy, is so frequent, as almost to be considered a constant termination of those cases which last long enough.

Esquirol found, amongst 339 epileptics, 269 in a state of mental alienation, a very large proportion, and one which would be increased if the final history of the remainder could have been investigated. In such cases as these, then, the final condition is one of mental deterioration, muscular degeneration, and occasional convulsive attacks. The morbid appearances usually found are, adhesions of the membranes, sometimes with thickening and opacity, induration of the white matter (but *occasional* softening); the same changes in the grey matter with a mottled appearance. (M. Foville.) These appearances are precisely identical with those found in another class of cases, viz., insanity complicated with paralysis. The history of these is similar to that of the others, with this exception, that in these the psychical degeneration comes on first, and is succeeded by the muscular degradation, and, finally, by the epileptiform seizures which are so constant an attendant upon this form of insanity; the final condition is the same—mental deterioration, muscular degeneration, and occasional convulsive attacks. This similarity of history with *identity* of results, whether we regard the last living state or the morbid appearances after death, cannot fail to indicate strongly and clearly the close connexion which exists between the two diseases; and we therefore conclude that epilepsy is much more closely allied to insanity than to convulsive affections in general. The most frequent form under which insanity invades the epileptic patient is *dementia*, the next, mania; monomania is occasional, but very rare. (Esquirol.) We need scarcely add our testimony to the almost universal conviction of the intractable nature of these *allied* affections; *singly* they are frequently amenable to treatment, but, whether commencing by epilepsy and passing into insanity, or by insanity passing into epileptiform attacks, no sooner does the one threaten to complicate the other than the prognosis is much more unfavourable, and almost hopeless.

To be continued.

ART. IV.—PSYCHOLOGY OF DESCARTES.*

DESCARTES stands at the head of the whole continental school of speculative philosophy, as Bacon is the presiding genius of all our own science. To speak of the schools of Locke and Reid (which have been mainly inspired by the Baconian spirit) as *sensational*, we regard as an injustice. The real view of the case is, that among ourselves the inductive mode of pursuing knowledge has mainly prevailed over the theoretic. Even Dugald Stewart, after Reid had established the intuitive and *à priori* character of the ultimate grounds of truth, still speaks of the "Inductive Philosophy of the Human Mind;" and very properly: for we only know that any first principle is an element of the psychology of man, by finding that it is not peculiar to our own minds or to a few others, but is common to the race: in other words, we know the principle as a psychological generalization, by induction. Now, on the continent, so far as the Cartesian tendencies have been followed up, the aim, in psychological speculation, has been generally to seize upon some one or more principles supposed to be intuitive and ultimate, and thence to deduce a whole system of metaphysics—such as it has sometimes been—independently of experience.

In like manner, however, as we dislike the epithet "*sensational*," as applied to characterize the psychology of the Lockian and Reidean schools, just because it plainly fails to describe them—so we should object to attempt drawing too sharp a line of demarcation between these schools and that of Descartes, especially as represented by himself and some of his less adventurous followers. That many who acknowledge him as their first leader have gone into an unrestrained idealism, everybody knows; but we shall be safe if we say that while the Baconian school of philosophy, whatever subjects it may happen to cultivate, is marked by a closely inductive spirit, which admits first principles, indeed, (as all schools must,) but admits them cautiously; the method professedly derived from Descartes has often really exhibited (according to his own example) a signal deviation from its master's best rules, and has, by a misapplication of the deductive process, often landed philosophers, however "*pitiless*" their logic, in absurdities which were certainly pitiful enough, and which soon ceased to have any authority when once their fashion was over.

Descartes would no doubt have been as much surprised to find himself charged with being the prime agent in leading the way to the German Pantheism, as Locke would in having laid at his door the

* Discourse on the Method of Rightly Understanding the Reason: and Meditations on the First Philosophy. From the French of Descartes. Simpkin and Marshall, 1851-3.

gross materialism of Cabanis, and all the horrors of the old French revolution. It is easy enough for ingenuity, inspired with the determination of finding everywhere a system, to refer the most extreme opinions back to sources which have really little to do with them, and which are truly due only to perversions and distortions for which the original sources are not fairly responsible. We say this, because not only Locke, but Descartes also, has, in our judgment, been rather too hastily identified with speculators of a date remote from his own age; though we have never doubted that, notwithstanding his exalted merit, he has, in all conscience, a sufficient amount of error to answer for on his own account.

Descartes was born of a good family at La Haye, in Touraine, in 1596; and was educated by the Jesuits in the neighbouring seminary of La Flèche. According to the fashion of his rank in life, he entered the army, and is said to have fought very bravely at the battle of Prague, in 1620. He afterwards travelled in Holland, France, Italy, and Switzerland. On his return, he sold a part of his patrimony in France, and retired to Holland, in order to devote himself, in seclusion, to the philosophical and mathematical inquiries to which he was addicted. As the fame of his discoveries and speculations increased, he became obnoxious to the Church, though no one could be more obsequious to it; and he was exposed to some danger in consequence; so that he was glad to accept an invitation to reside at Stockholm, from Christina, that very eccentric young queen of Sweden, whose passion it was to surround herself with foreigners, chiefly Frenchmen, of whom some were true *savans* and others mere pretenders. Assured of a safe asylum from his enemies, in Sweden, Descartes repaired thither in 1649; but the coldness of the climate was more than the delicacy of his constitution could bear, and he caught a cold in one of the unseasonably early morning visits which his royal pupil exacted of him—the hour of five being fixed on for the lesson—and he died of peripneumony in 1650. His remains were taken to France, and interred with great ceremony in St. Geneviève du Mont.

Perhaps there are few more striking examples of the strength and weakness of human reason than Descartes. He was an apt student at his college of the learning of the day, and took large draughts of the *encyclicæ disciplinæ*, as set forth in the *trivium* and the *quadrivium*, according to the fashion of the age.* Yet such was the precocious

* Δευτέρως δὲ ἐγκύκλια μαθήματα καλοῦνται
Ὁ κύκλος τὸ συμπέρασμα πάντων τῶν μαθημάτων,
Γραμματικῆς, ῥητορικῆς, αὐτῆς φιλοσοφίας,
Καὶ τῶν τεσσάρων δὲ τεχνῶν τῶν ὑπ' αὐτὴν κειμένων,
Τῆς ἀριθμολογίας, μουσικῆς, καὶ τῆς γεωμετρίας,
Καὶ τῆς οὐρανοβάμονος αὐτῆς ἀστρονομίας.

Tzetæ Hist. Var. Chil. xi. 520. Lips. 1826.

independence of his mind, that, on quitting La Flèche, he declared that all the benefit he had derived from his college course was a profound conviction of his own ignorance, and as profound a contempt for the reigning philosophy of the schools. Hence he resolved to enter on a system of independent research, and to doubt of everything until he had in some way convinced himself of its truth. But though he thus set out with what may be called, in the best sense, a universal scepticism, many of his theories are based on the most unphilosophical credulity; so that it has not been said without reason that he "began by doubting everything, and ended by believing anything."

Descartes published his *Discours de la Méthode pour bien conduire sa Raison, et chercher la Vérité dans les Sciences*, in 1637; his *Meditationes de Prima Philosophia*, in 1641; and in the same year came out his *Responsiones ad Objectiones*. The *Principia Philosophiæ* was published in 1647; and the work entitled *Les Passions de l'Ame*, in 1649, not long before his death. These writings contain the principles of his psychological and metaphysical philosophy, as also of his natural philosophy and cosmology; and his treatises, *La Dioptrique*, *les Météores*, and *La Géométrie*, were given as illustrations of his method. Posthumously were published, *Regulæ ad Directionem Ingenii*, and *Inquisitio Veritatis per Lumen Naturale*.

The preliminary to Descartes' method is *doubt*, or neutrality as to belief or disbelief,—in fact, suspension of judgment; not, indeed, the captious uncertainty of the sceptic, which makes doubt an end in itself, identifying it with the absence of all truth and effective conviction: the Cartesian doubt, on the contrary, is to prevent error, and is not merely negative; it is to lead to truth. This scientific doubt is of course opposed to the dominion of all mere authority in the sphere of the true and the false. Not only, therefore, must great names here go for nothing, but all the convictions which have grown up from infancy, by education and habit, are to be held in abeyance. How fatal all this must have been to the lingering scholasticism of the early part of the seventeenth century, is evident! But the hour of scholasticism had already arrived, and Bacon and Descartes had each a mighty hand in prostrating it for ever. What the former did in England, the latter did on the continent of Europe. There is evidence that Descartes was acquainted with the writings of Bacon before he had published anything of his own; but the independence of his mind and the originality of his method are not affected by this fact. Descartes tells us that he had begun to seek truth as far as possible for himself, independently of all authority, as early as 1619; which was rather sooner than the first publication of Bacon's great work, the *Novum Organon*. Descartes' method, too, in its application and development,

leaned in an opposite direction to that of Bacon, wherever a choice of procedure was possible in the pursuit of scientific inquiry. From this source we trace not a few of the egregious errors in physical science which the progress of knowledge has utterly exploded, but which Descartes propounded with a full conviction of their truth. Bacon's method was decidedly inductive and practical, Descartes' was deductive and theoretical. Bacon sought for causes from their effects; Descartes says in so many words, "I seek not causes from their effects, but effects from their causes."

Much as there is to except against the method of Descartes in many of the cases in which he has applied it, nothing can be more beautiful than the child-like openness and simplicity of mind with which he describes his first attempts, at nineteen years of age, to revise all his opinions, and, if possible, to detect those which were erroneous, and set those which were true on a sound basis. It is quite refreshing to find so great a mind so completely divested of all dogmatism and so open to conviction, so willing to unlearn as well as to learn. Is not this, however, what we might expect from an intellect of the highest order? There are men who see no difficulties; why so? Because they do not see far enough and deep enough. They have not enough comprehension to be good doubters, and they have not humility enough to allow themselves to be corrected and convinced of error. Not so Descartes; and if his subsequent career might seem little in keeping with his earlier caution and cool judgment, it was that he became so passionately enamoured of his method, that his imagination at last fairly ran away with his discretion, more especially as regarded his speculations in physical science.

"From my childhood I have been familiar with letters, and as I was given to believe that by their help a clear and certain knowledge of all that is useful in life might be acquired, I was ardently desirous of instruction. But as soon as I had finished the entire course of study at the close of which it is customary to be admitted into the order of the learned, I completely changed my opinion, for I found myself involved in so many doubts and errors, that I was convinced I had advanced no further in all my attempts at learning, than the discovery, at every turn, of my own ignorance. I revered our theology, and aspired as much as any one to reach heaven; but being given assuredly to understand that the way is not less open to the most ignorant than to the most learned, and that the revealed truths which lead to heaven are above our comprehension, I did not presume to subject them to the impotency of my reason, and I thought that in order competently to undertake their examination, there was need of more special help from heaven, and of being more than man. Of philosophy I will say nothing, except that when I saw that there is not a single matter within its sphere which is not still in dispute, and

nothing, therefore, which is above doubt, I did not presume to anticipate that my success would be greater in it than that of others; and, further, when I considered the number of conflicting opinions touching a single matter that may be upheld by learned men, while there can be but one true, I reckoned as well-nigh false all that was only probable. And as to the other sciences, inasmuch as these borrow their principles from philosophy, I judged that no solid superstructures could be reared on foundations so infirm; and neither the honor nor the gain held out by them was sufficient to determine me to their cultivation, for I was not, thank heaven, in a condition which compelled me to make merchandize of science for the bettering of my fortune; and though I might not profess to scorn glory as a cynic, I yet made very slight account of that honor which I hoped to acquire only through fictitious titles. And, in fine, of false sciences I thought I knew the worst sufficiently to escape being deceived by the professions of an alchymist, the predictions of an astrologer, the impostures of a magician, or by the artifice and boasting of any of those who profess to know things of which they are ignorant." — *Discours de la Méthode*, part the first.

The upshot of this state of mind in our young philosopher was, that he resolved to shut up his books, and to study the great volume of the world and *himself*. He spent some years in travelling, and in courts and armies, and in trying to learn something from everything. He then, as he tells us, resolved to turn his attention home upon his own inward consciousness; to endeavour to reject all the opinions and modes of thinking which seemed rather due to fashion and education than to reason, and to construct for himself a new edifice of knowledge out of those materials, only, which he had tried and tested to the utmost of his power: for a comparison of social life and current ideas, in the different nations and grades of society with which his travels made him acquainted, had led him to "infer that the ground of our opinions is far more custom and example than any certain knowledge," and to "remark, that a plurality of suffrages is no guarantee of truth where it is at all of difficult discovery." Descartes thought, further, that if he could only fulfil his unwavering determination to bind himself down to the four following laws, in the conduct of his understanding, he should find them quite sufficient as a guide to the discovery of truth. His rules were: "*first*, never to accept anything as true which I did not clearly know to be such; *secondly*, to divide each of the difficulties under examination into as many parts as possible; *thirdly*, to conduct my thoughts in such order as to commence with the simplest and easiest objects, and so to ascend by degrees to the knowledge of the more complex; *fourthly*, in every case to make enumerations so complete and reviews so general, that I might be assured nothing was omitted." True enough these rules are good;

but the difficulty is to make sure of reducing them to practice, especially the first and the last.

Descartes was, probably, the first philosopher who laid down the position, in formal terms, that to every person of the least reflection there is one truth more unassailable than any other—namely, his own personal existence. No matter what may be our ontological theory of body or of mind, our conviction that we *are* remains always the same. A man may say that mind is only a function of matter, or that mind and matter are identical, or that body is nothing but force or centres of force, or that the whole material universe is an illusive ideal panorama and not a reality; he may be a disciple of Berkeley, or of Leibnitz, of Fichte, Schelling, or Hegel, or of Cabanis and the materialists; he may begin with one of these opinions, and successively adopt each, and go the round of them; but amidst all the transmigrations through which his opinions may pass, all the metamorphoses of his psychological system—amidst all scepticism, all dogmatism, all pantheism,—in short, all the phases of his belief and his philosophy, he never can for a moment doubt that all these changes are changes of *himself*, that there is a *me* which undergoes them, and that this *me* is conscious of itself. This was the truth of which Descartes pronounced that it is intuitively, irresistibly, and irrevocably certain, admitting of no doubt; since, if the absurdity could be imagined of a man doubting his own existence, the very doubt itself is an act which involves the conscious existence of the doubter. As a general rule, indeed, all philosophical inquiry must, wherever possible, according to Descartes, be preceded by doubt. Once in our lives, he remarks in his *Principia*, we should doubt of everything as far as we can, in order to discover truth—doubt of whatever admits the possibility of the question, “is it true, or is it not?” He found that he could doubt of everything which his senses appeared to teach him. “All this might possibly be a delusion; for the senses do frequently lead us astray—witness optical illusions.” Again, the conclusions of the understanding, however certain they might eventually turn out to be, at all events admitted of inquiry as to their validity before they should be received as certain truth. “Thus, rejecting all those things concerning which we can in any way doubt, and imagining them to be false, we may assume that there is no God, no sky, no bodies—that we ourselves have neither hands nor feet, nor in fact a body; yet we who devise to ourselves such cogitations cannot imagine that *we are nothing*, for it is a contradiction that we should think and not exist.” Hence the truth, *ego cogito ergo sum*, the first and most certain truth which presents itself to any one who seriously sets himself to philosophical thinking. “Hence,” says our author, in the fourth part of

the *Discours de la Méthode*, "though I resolved that all things which had entered my mind were not more true than my dreams, yet it was necessary that I, who thought, must be something. This truth is so firmly assured that it can never be shaken by sceptics; and I judged that I might receive it as a first principle of the philosophy I sought. I could suppose that I had no body, that there was no world, no place where I was, but not that *I* was not."

It is proper here to remark that Descartes did not lay down his first principle, *Je pense, donc je suis*, as a logical argument, an enthymeme (according to the more modern use of this term) or syllogism with one of the premises (here the major) suppressed. This would have clearly involved the *petitio principii* which Gassendi and others hastily charged him with in the use of this aphorism. Spinoza, the learned and accurate commentator on Descartes, has justly remarked, in his work entitled *Renati Descartes Principia Philosophiæ, more Geometrico Demonstrata*, that he only meant to state the fact that our thinking is attended with an irresistible conviction of our existence. For Descartes himself, in his *Responsio ad Secundas Objectiones*, says in so many words,—“I think, therefore I am, or I exist, is not concluded by force of a syllogism, but as a thing self-evident.”

Having convinced himself that this one truth might be regarded as utterly beyond all question, Descartes proceeds, in his Discourse on Method, to inquire why he could not but admit it, and in general what is required for a proposition to be regarded as true? He replies,—“I found that, in ‘*I think, therefore I am*,’ there was nothing to induce me to believe it true excepting that I see clearly that, *to think, it is necessary to be*. I then concluded that all the things which we conceive very clearly and distinctly are true, and that there is only some difficulty in well-remarking what those things are which we conceive distinctly.” Hence, it is evident that our illustrious philosopher makes consciousness the point of departure for the discovery of all other truth. He therefore laid down as a fundamental element of his system, that *all our ideas which are perfectly distinct are true*. In his *Principia*, he calls this axiom the “foundation of all science, and the measure and rule of truth.” It was even the secret basis of his conviction of his own existence. He believed this latter truth, because “whatever is clearly and distinctly conceived of as existing, and cannot but be so conceived when thought of, must really exist.” How wide a field this axiom may open to the illusions of imagination, prejudice, and self-will, must be evident to the reader! Leibnitz subsequently tried, with whatever success, to limit and rectify this somewhat ominous element in the Cartesian philosophy.

Our author further tells us that those chains of geometrical reason-

ing by which the most difficult demonstrations are reached, led him to the conclusion that a similar procedure should be applied to all human knowledge; and that if we only take care not to admit anything as true which is not so, and preserve the proper order of deduction, like the mathematicians, we may attain to all the truth which men can know.

It is evident from the above that four separate elements meet us on the threshold of the Cartesian psychology; namely, that all our knowledge ought to be preceded, as far as possible, by previous doubt; that there is one fact which we cannot doubt of, which is, our own existence, the primary and most indubitable of all truths to every thinking being—for himself; that the criterion of this and all other real truths is the perfect clearness and distinctness with which it is apprehended; and that the method which we should always try to employ in the pursuit of science and philosophy, is the mathematical or deductive. In reference to this last principle, Descartes says, in the third part of his *Principia*, that his object is to “*deduce effects from causes, and not causes from effects.*” This remark shows how much he leaned to the *à priori* method of inquiry, and how different a tendency his philosophy exhibits in the outset from that of Bacon, who made *induction*, or the *à posteriori* method, everything. We say “tendency;” for neither could Descartes confine himself wholly, in the development of his principles, to pure deduction, nor Bacon, on the other hand, fail of applying intuitive, or *à priori* elements in dealing with his inductions. In the doctrine of causation the two principles may be said to meet. In concluding by induction we establish a general fact by bringing in a certain number of instances; and we then assert, that wherever the like instances occur again they are to be traced to similar causes. Hence, even in induction we assume the uniformity of the laws of nature; which is only another way of saying that like causes, in like circumstances, produce like effects.

Descartes, in illustration of his method, applies it to the proof of the existence of a Deity. The arguments on this subject are stated the most clearly and with the greatest condensation in Descartes’ *Responsio ad Secundas Objectiones*. We will give them nearly in his own words:—“First, the existence of God is known from the consideration of his nature alone. *Demonstration*: To say that an attribute is contained in the nature or concept of a thing, is the same as to say that this attribute is true of this thing, and that it may be affirmed to be in it; but necessary existence is contained in the nature or concept of God; hence we may say with truth, that necessary existence is with God, or that God exists. Secondly, the existence of God is demonstrated from this alone, that his idea is in us. *Demon-*

stration : The objective reality of each of our ideas requires a cause in which this same reality is contained, not simply objectively, but formally and eminently : but we have in us the idea of God, and the objective reality of this idea is not contained in us, nor can it be contained in any other except in God himself. Thirdly, the existence of God is also demonstrated from this, that we ourselves, who possess the idea of him, exist." Here Descartes employs a somewhat tedious *sorites* (which we omit for the sake of brevity) with a view to prove the conclusion, from our "not having the power of self-conservation, and so being conserved by another who has in himself all the perfections that are wanting in us, and thus being God."

The first of these arguments is *ontological*, or founded on the very nature or essence of the idea we have of God, which is "that of a Being omniscient, all-powerful, and absolutely perfect. In this idea there is contained existence absolutely necessary and eternal. The equality of its three angles to two right angles is necessarily comprised in the idea of a triangle, and the mind is firmly persuaded of this equality ; so, from its perceiving necessary and eternal existence to be comprised in its idea of an all-perfect Being, it ought to conclude that he exists."* The second argument is the *psychological* one. It is founded simply on the fact that we have, or are capable of having, an idea of an all-perfect Being in our minds, and with the greatest possible clearness and distinctness, however inadequate this idea may be.† Now it is tolerably evident that both these arguments, though they have been distinguished by name, are, in strictness, the same : they are both psychological ; they are based on our *conceptions*. We have certain ideas of a Supreme Being, "therefore he exists." As to the third argument, it has confessedly, at the base of it, the doctrine of causation. "From whom could I," asks Descartes, "derive my existence, if there were no God?"‡ He decides that he could not, on that supposition, have been preserved in being, nor, indeed, have existed at all. The last argument is less Cartesian than the rest in its basis, though it also is blended with trains of *à priori* or deductive reasoning.

We have long been convinced that every genuine argument in proof of a Deity must ultimately resolve itself into some form of the doctrine of causation ; and we think so still, after again reviving our converse with Descartes. We apprehend that Descartes' argument from the *clearness* of our idea of a Deity, and from what is the necessary analysis of that idea, is assailable on many sides. The utmost that we can say in this direction, if we wish to base our inquiries on

* Princip. Philos. XIV. Meditat. V. † Meditat. III. ‡ Ibid.

a psychological principle common to mankind, is, that all men have a notion of power beyond human: but this notion may be polytheistic, fetish, degraded in the extreme by its adjuncts—as well as monotheistic and Christian. Grant even that a very clear idea of one infinite Supreme were universal, may we not ask, “does a clear conception of a thing guarantee its existence—a mountain of glass, for instance? Descartes anticipated this objection, and he offers a reply to it, in his Fifth Meditation, as follows:—“I cannot conceive God unless as existing; it follows that existence is inseparable from him: not that this is brought about by my thought, but, on the contrary, the necessity which lies in the thing itself determines me to think this way: for it is not in my power to conceive a God without existence.” Thus Descartes makes the ontological argument corroborate the psychological; but is the elucidation satisfactory? We think not. Descartes further explains:—“It is not in my power to conceive a God without existence, that is, a Being supremely perfect, and yet devoid of absolute perfection: as soon as I discover that existence is a perfection, I infer the existence of this first and sovereign Being. I can conceive no other being except God, to whose essence existence belongs.” Descartes, in short, maintains that the idea of God is psychologically innate, *née avec moi*, in the highest sense in which the term innate can reasonably be used; and that, ontologically, necessary existence is essential to the very idea of God. Now we would venture to say that what is truly “innate” (in the Cartesian sense)—we would rather say *intuitive*—is the principle of *causation*: to believe that every change must have a cause is constitutional to the human mind, and this principle lies at the basis of rational religion. The ontological argument of Descartes, so far as distinct from the psychological, is a *petitio principii* so evident, that nothing but the passion which he had for *à priori* reasoning, or the deductive method, as though it were almost everywhere applicable, could have prevented him from seeing it. We repeat our conviction that the principle of causation will be found lying, in some form or other, at the basis of all satisfactory evidences of the Divine existence. We are capable, no doubt, of forming some sort of conception of a Being infinite, eternal, all-perfect. Whence this range of thought, only the grander and the more sublime because we can sufficiently measure it with its object to know how limited it is? Whence those faculties of man? Whence came they, what is their origin, their cause? But our space will not allow us to pursue this topic.

Descartes further held the existence of God to be the basis of all other truths. Even geometrical demonstrations have no other founda-

dation than his existence.* “If I did not know that there is a God, I might readily come to doubt of the truth demonstrated that the three angles of the rectilineal triangle are equal to two right angles. But after I have discovered that God exists, as I at the same time observed that all things depend on him, and that he is no deceiver, I thence infer that all which I clearly and distinctly perceive is of necessity true; and on the right conception of the existence of a Supreme Being the certitude of all other truths is so absolutely dependent, that, without this knowledge, it is impossible ever to know anything perfectly.”† This theory of truth, we must venture to say, is, at the least, exceptionally expressed. Not that there is any doubt that, as God is the author of all created being, the relations of things, not excluding those of mental phenomena, are so far dependent on him. Nether is it “possible for God to lie.” Yet man may deceive himself, or be deceived, sometimes even when he thinks his mental vision the clearest. Again, is there not a *nature of things* which we cannot suppose altered, under any circumstances? Can we imagine it possible, in any time, or in any world, that a triangle can be conceived which should not retain its existing properties? If we receive some of the statements of Descartes as they stand, a speculative atheist must, as such, ever remain ignorant of geometry!

Descartes’ theory of our knowledge of a Deity, and of innate ideas in general, has been sometimes much exaggerated; though, it must be confessed, his phrase *née avec moi* was not well-chosen to express what he really meant. Voltaire, in his thirteenth Letter “On the English Nation,” says that our author asserted that “the soul at its coming into the body is informed with the whole series of metaphysical notions, knowing God, infinite space, possessing all abstract ideas.” Not so. Descartes denies, altogether, that he meant any such thing. In his “Reply to the Objections of Hobbes,” he explains *ideæ innatæ* as those ideas which the mind has the faculty of eliciting for itself.‡ In the ninety-ninth Letter of the first part of his own Correspondence, he uses even still more qualified and popular language, stating that when he said the idea of God was innate in us, he never meant more than that nature had endowed us with a faculty by which we may know God. “I never said, or thought,” he adds, “that such [innate] ideas had an actual existence, or even that they were *species* distinct from the faculty of thinking.” The latter clause of the remark is quite in harmony with Descartes’ general repudiation of the ancient

* And, we may add, his *will*; for, according to Descartes, the equality of the three angles of a triangle to two right angles, is a consequence of the will of God; hence the proposition is true and cannot be otherwise.

† Meditat. V.

‡ Denique cum dicimus ideam aliquam esse innatam, intelligimus tantum nos habere in nobis facultatem illam eliciendi.

ideal theory, that of images or species existing in the sensorium. He defines ideas as being "all that is in our mind when we conceive a thing, in whatever way;" and he distinguishes them into three sorts, (*adventitious*, as the common idea of the sun; *factitious*, as the idea of the sun which astronomy gives us; and *innate*, as the idea of God, of mind, of a triangle,) as may be seen in his *Meditations*. In his *Traité des Passions*, he classifies ideas (by a phraseology which appears to us not very happy) into forms of thought, of passion, and of will.

In our philosopher's theory of *substance* we see a germ of Spinozism. A substance he held to be that which exists *really*, the Deity alone being such in a proper sense—a true substance requiring nothing besides itself for its existence, while all else can exist only by its concurrent energy.* There are two kinds of finite, created or secondary substances—matter, and mind or soul. The nature of matter consists solely in its being something extended, the extension of which does not differ from the thing itself which is extended.† "Matter and extension are the same thing."‡ Here it would seem that matter and extension are completely identified by Descartes. He says that extension in three dimensions constitutes the *nature* of bodily substance. "Extension alone remains," he says, "when we reject hardness, colour, weight, heat, cold, and other qualities, which are not essential to body."§ This was certainly a far advance towards the succeeding idealism of some of the Continental schools, if not idealism itself. In regard to mind or soul, "it is my nature," says our philosopher, "that I am a thinking being, which is called mind, soul, intellect, reason; and this nature is more known to me than the nature of my body is. This I clearly and distinctly perceived."|| "I concluded that I was a substance of which the whole essence or nature is only thought."¶ His language in some places certainly identifies mind with thought, like some of the later German speculations. He says (perhaps ambiguously) that "thought ought not otherwise to be conceived of than as thinking substance itself."** But there is a want of uniformity and consistency in his definitions both of mind and matter. For while he in some passages as clearly identifies matter with extension, and mind with thought, as language can do it, at other times he plainly speaks of extension and thought as properties. He even calls them "modes of substances," nay "properties of substances." It is safer to hold in abeyance the charge of decided idealism against Descartes, since his language on the above subjects thus vacillates; though not a

* Principia, Pars I.

† Ibid. II. 8.

‡ Est igitur materia et extensio idem. Ibid. 21.

§ Principia, I., II. || Ibid. I., also, Discours de la Méthode. ¶ Ibid. IV.

** Cogitatio et extensio non aliter concipi debent quam ipsa substantia cogitans, et substantia extensa. Princip. I. 63.

few of his statements with regard to substances, extension, and thought, might evidently excuse such a charge.

Our author states, in his Sixth Meditation, that in speculating on the existence of a material world he found that he could, without much difficulty, suppose himself to be deceived in his belief in sensible objects around him. Even their independence on his will did not seem decisive of their existence; for was it not possible that, in himself, there might be a faculty, though unknown to his consciousness, producing those phenomena? Every student of the German philosophy must at once perceive the identity of this hypothetical statement with the avowed theory of Fichte. Our author, however, finally decided on admitting an outward universe on the ground of the Divine veracity. "As God has given me a very strong inclination to believe that these ideas (of material things) arise from corporeal objects, I do not see how he could be vindicated from the charge of deceit, if in truth they proceeded from any other source, or were produced by other causes than corporeal things; accordingly it must be concluded that corporeal objects exist." Now we confess to having no *penchant* towards the pure idealism of Berkeley, or the pseudo-idealism of Malebranche;* much less are we enamoured of the Fichtean pantheistic egoism, with its self-created phantasmagoria: yet we can hardly think that the question about the nature of external agencies, whether they are material or only dynamical, or nothing less than the immediate actings of the Creator himself, can fairly be said to have anything to do with his veracity, be the question determined as it may; for either of those speculations may very well consist with morality and religion, whatever may be said of the ingenious idealistic romance of Fichte. We fear that Descartes' argument respecting our own clear and distinct conceptions, in connexion with the veracity of the Deity, would prove rather too much, if we may judge from the history of human opinions.† In regard to the communication which takes place between the soul and the body, Descartes supposed a very subtle fluid,

* Malebranche admitted in theory the real existence of external objects; but his principle, *nous voyons tout en Dieu*, practically discarded matter by excluding it from our perceptions.

† Of course we have no doubt of the veracity of the human faculties in their proper sphere; we have, indeed, nothing else to trust to for our knowledge. The only question here is, how far can they penetrate into the mysteries of nature, of which, undoubtedly, the ultimate constitution of the outward universe is one? There is a hackneyed argument against Descartes' proof, of another kind: it is said he proves a Deity from the veracity of our faculties, and then proves the veracity of our faculties from a Deity. But how could he or any one else prove a Deity but by arguments based on the reliableness of certain psychological principles—i. e., of the human faculties? and must not every theist believe that God is true, and no deceiver? The only question is—could the Deity be implicated in any errors into which his creature might fall, in an attempt to get behind the scenes of the creation? We think not.

the *spiritus animales*, secreted from the blood, and circulating in the "tubular nerves:" in this way external objects affected the soul, resident in the pineal gland of the brain; and the commands of the soul were conveyed, in the contrary direction, to the muscles, in voluntary motion. From this hypothesis we still retain the phrase *animal spirits*, though with another meaning.

On the subject of the Divine agency in the universe, our philosopher held that mind and matter only continue to exist by the perpetual aid (*assistentia*), and co-operation (*concursus*) of the Deity, a doctrine which must of course be admitted, in some form or other, by every Theist. Descartes said that the whole creation depends, for its subsistence, as much as for its original existence, on the *vis creatrix*, or productive agency of the Creator. President Edwards expressed the same views still more strongly, when he said that the continued existence of the moon amounted to a perpetual re-creation of that orb. Geulinx, of Antwerp, endeavoured to deduce, from the doctrine of *concursus*, that of *occasional causes*, or the principle that the Deity is the real author of all the movements, both of finite minds and of bodies, and that there is nothing in them but certain occasions on which he acts. We cannot see in the doctrine of Descartes, as above stated, any necessary germ of Pantheism, as some theorists pretend. That the *occasional causes* of De la Forge and Geulinx may have suggested the *Pre-established Harmony*, and *Optimism*, as maintained by Leibnitz, is very possible. Of Descartes, it is fair to say, he is clear in asserting human freedom, though his genius for abstract speculation led him to dwell more on ideas than on action. He justly remarks, that the mind is free in its volitions, because it is conscious of freedom—the strongest of all arguments.

Descartes is, in some respects, the Bacon of the continental schools, much as he deviated from his prototype. He gave the first impulse to their speculative psychology. The philosophic rationalism of the Cartesian metaphysics, in its *à priori* method, is still pointed to by the Germans as that to which the spirit of their leading systems may ultimately be traced back. He was the first among the moderns to apply the Baconian idea of *observation* distinctly to the operations of thought in consciousness; and in thus isolating thought from all that is not thought, in distinguishing it from all material analogies and adjuncts, Descartes, as Dugald Stewart has remarked, "laid the foundation-stone of the experimental philosophy of the human mind." That the superstructure which he attempted to rear on this basis was not always homogeneous with it, must be admitted by all competent judges. The very idea, however, at his time of day (while the mists of the middle ages were still damp and bewildering on men's intel-

lects) of making a sort of *tabula rasa* of his mind, unlearning all that he had learned, and beginning afresh with the horn-book of knowledge, was a noble aspiration, and worthy of a great genius; and, if the issue did not altogether fulfil the omen of the beginning, we must remember that *to err is human*. His zeal in determining to consult diligently the actual facts of consciousness for himself, merits high praise; notwithstanding his frequent failure in the application of his deductive method, often from his not seeing that it was not applicable to the case; of which some of his physical speculations present flagrant examples. Admirably as he set out, by paying homage to the supremacy of consciousness, and making doubt the pioneer of certainty, he soon went astray by a too great love of theory; his doubttings were exchanged for credulity, and he fell into manifest inconsistencies. For instance, he sometimes repudiates, in terms, all light from final causes, while, at other times, he admits them.* His notions that all we distinctly and clearly conceive is true—that whatever we find in our ideas must necessarily be in the corresponding external things—that every effect must have the same reality as the cause—are evidently liable to give rise to the highest flights of mysticism and idealism, in other hands. In his relation to the German philosophy, indeed, he has not inaptly been termed the “Father of Modern Idealism.” Leibnitz said that the chief merit of Descartes lay in recalling the Platonic, or *à priori* method, in withdrawing men from exclusive attention to the senses, and in reviving the doubting spirit of the ancient Academicians.† Some of the more recent Germans have pursued their speculations by Descartes’ general method, with developments of which, no doubt, he never could have dreamed. His aphorism—“we desire to deduce effects from causes, not causes from effects,” has been extensively patronized in Germany. His notion of substance was converted, in the hands of Spinoza, into a Pantheism, which made the Deity the only real being in the universe; and his ambiguous way of speaking about mind and thought, so as sometimes to identify them, was much like an anticipation of the absolute idealism of Hegel.

The method of Descartes, in its developments, after its basis has been laid, (as that of all methods must, in consciousness) may be termed the *rational method à priori*, as distinguished from that of Bacon—that of experience and deduction. Consciousness was to furnish principles; reason was to deduce results. All science was to be constructed on the twofold basis of intuition and deduction. Irresistible, unassailable truths, were to form the secure foundation; a procedure akin to the mathematical was to rear the goodly superstructure. Away with the doubtful testimonies of sense—away with the delusive colouring of

* Vid. *Traité des Passions*; art. 175.

† Leibnitz’s Letter to Bierling.

imagination, said our philosopher; let us have the intuitive utterances of consciousness, in the pure intellection of the simple, the eternal, the infinite, the absolute. It is the inward apprehension of distinct and clear conceptions, like those of geometry, that must be the cornerstone of all science.* It is assumed that these conceptions, so pregnant with results, can be readily distinguished from the mere impressions of imagination, however vivid, though not a few of Descartes' theories somewhat mar the hopeful prospect, by proving the contrary. The pure conceptions of the mind are to be so clear as to be necessary; the deductions, too, are to be necessarily drawn. The entire method of all science, psychological and physical, is to be assimilated to mathematical demonstration. You are to follow the rational procedure. How do you know that, on the same base, the angle at the centre of a circle is double that at the circumference? Not by admeasurement, not by induction, not in any way by experience—certainly not: you know it by an inevitable deduction from the very definition of a circle in the abstract, a circle which exists neither in nature nor in art, but only in the intellect. Now it was this procedure of geometricians, Descartes tells us, that suggested to him a universal application of it to all our knowledge; and he does not seem to have sufficiently seen the difficulty of applying a method which appropriately belongs to the notions we have of space, to other and very different subjects. Indeed, to find a universal mathematic was his hobby-horse; and on this steed he tried to ride rough shod over all obstacles.† We have seen that, in proving the existence of a Deity, he passes lightly over any evidence furnished by the universe, with all its harmonies and wonders; like Kant, he neglects it with indifference, as not scientific; he rejects the evidence of final causes, and he rests the burden and the fate of the argument on our bare conception of the infinite and the perfect, as a conception involving the necessity of the existence of God, in the same way as the conception of a triangle, as such, necessarily implies all its properties. Instead of arguing the existence of a Deity from the universe, he prefers an Optimism which argues that the universe must be what it is from the existence of the Deity, known by the conscious existence of the *moi* and its *à priori* ideas. He does not insist that there must be a God from the order of the universe, but that there must be a certain order in the universe, because there is a God. Here, we find Descartes and his school down to the modern Germans, opposed to Bacon and his school down to the followers of Locke and Reid. Bacon would say, observe accurately with your senses and your mind,‡

* *Vid.* Regulæ ad Direct. Ingen., III.

† *Discours de la Methode*, II. Regulæ ad Direct. IV.

‡ *Re vel Mente*. Nov. Org. Aph. I.

and then draw your inferences: Descartes speaks of "closing his eyes and shutting his ears," in order more intently to listen to the inward voice of reason.* The school of Bacon is jealous of intuitions where it is not shut up to them, and seeks for experience wherever it can be found: the school of Descartes exalts reason and her intuitions often to a giddy height, where all brains must swim and all vision be dizzy; on experience the school relies as little as possible.

Probably no writer, either in ancient or modern times, ever gave a more powerful impulse to philosophical studies than Descartes; and, to these, mathematical studies especially, may be added. Bacon is called the father of experimental science: Descartes has been termed the father of modern philosophy; and, in the German sense of *philosophy*, at least, this is no doubt true; for psychologists and ontologists in that country, have extensively adhered to his method: indeed he stands at the head of the modern names which have made psychology a science. His fame, however, is soundest and greatest as a mathematician. He touched no mathematical subject without displaying his inventive genius, by opening up a new field of investigation. He re-modelled the science of algebra, and applied it to geometry. He left the geometry of the Greeks far behind, by falling upon the idea of expressing the fundamental property of curves by means of equations between their co-ordinates. His claim to originality in his views on the constitution of equations, and the relation between their roots and co-efficients, has been strenuously contested by Dr. Wallis and others: but the new career which he opened up for the mathematical sciences, entitles him to the highest rank in genius for these pursuits.

The failure of Descartes' method is more flagrant in physics than anywhere else. He persuaded himself, however, that he was perfectly consequent to his *à priori* principles, in maintaining that a *vacuum* is impossible—that the same quantity of motion must always be preserved in the universe, because God is immutable; and from the same attribute he also argues the *inertia* of matter. From these and other principles he deduces his philosophical romance of the *vortices*, as accounting for the celestial motions. Newton, however, showed that the periodical times of all bodies that swim in vortices, must be directly as the square of their distances from the centre; whereas it is found by actual observation of the heavens, that the planets, in moving round the sun, obey quite another law, the squares of their periodic times being always as the cubes of their distances. Colin Maclaurin* remarks, not without irony, that from the manner in which Descartes set out, we might

* Meditat. III.

† Account of Sir Isaac Newton's Philosophical Discoveries.

already form some judgment "how hopeful his project was," of explaining the mysteries of nature by deducing effects from their causes. In justice to our illustrious philosopher, however, and in mitigation of his theory of the planetary motions, it should be remembered that, before his time, there had been no physical astronomy; the orbits of the heavenly bodies were not sought in any given law of force, but always in some sort of machinery, respecting the nature of which there had been many hypotheses. Descartes rejected all these, and adopted the notion of ethereal particles revolving round a centre, like the water in a whirlpool.

ART. V.—THE ASYLUM JOURNAL.*

THIS journal was projected at a meeting of the "Association of Medical Officers of Hospitals and Asylums for the Insane," held at Oxford in the month of July, 1852. Some gentlemen connected with the management of public asylums thought it desirable to publish an occasional fly-sheet or "Asylum Journal," to circulate principally among the resident medical superintendents of these establishments, in order to afford to these gentlemen a vehicle in which they could compare notes respecting points of practical interest connected with the conduct of such institutions, and the treatment of the insane confided to their professional care. The originators of this publication never contemplated establishing a journal in rivalry with our own. This idea was fairly repudiated at the meeting. It certainly occurred to us when the proposals for the establishment of this new journal were submitted to the consideration of the Oxford meeting, that if any of the medical men connected officially with public asylums had been anxious to bring any point of practical interest before their fellow-labourers or the profession generally, *our* pages would at all times have been open to them; but as they had not thought proper to send their communications to the *Psychological Journal*, we were at the time doubtful whether a periodical of less pretensions would receive such an amount of literary support as to render it at all useful to those for whose special perusal it was intended.

Dr. Bucknill, the well-known and intelligent physician of the Devon County Asylum, was unanimously selected to conduct the journal for the Association. It is now our pleasing duty to direct the attention of our readers to the result of his editorial labours. Dr. Bucknill has, we have no doubt, found, ere this, that in editing a periodical of this kind, he must, in the main, rely upon his own exertions. He has un-

* The Asylum Journal. (Thirteen Numbers published.) Edited by Dr. Bucknill, Resident Physician of the Devon County Lunatic Asylum. Highley, Fleet-street. Monthly, price 6d.

doubtedly had afforded him some degree of literary assistance, but not, we dare say, to the extent he anticipated when he consented to mount the editorial chair. Having been a few years in advance of Dr. Bucknill in wielding the editorial baton, we can speak practically of the difficulties that have beset our path in the conduct of a periodical like our own, devoted to the discussion of medico-psychological literature. We do not complain of the obstacles that have occasionally interfered with our successful onward march, or look back upon the past with any feelings of pain or regret. Our labours have been those of love. We were disposed at one time to entertain the opinion that some of the "veterans" connected with the department of the science of medicine we were engaged in cultivating, might have extended to us *some* degree of literary assistance, and occasionally have held out to us a helping-hand; but they, with a few brilliant exceptions, neither did one nor the other, from motives best known to themselves. Dr. Bucknill has, we have no doubt, experienced, in the editorship of his unassuming journal, difficulties somewhat analogous to those which, in a slight degree, somewhat damped our ambition during the earlier periods of the history of the *Psychological Journal*; but, like ourselves, he has triumphed over them, and has fairly launched his fragile bark upon those stormy seas, said to be—

"Bankrupt of life and prodigal of care."

The numbers of the journal before us contain papers of deep interest and great practical importance. The editor has, of course, contributed largely to the pages of the *Asylum Journal*. We refer particularly to a valuable, well-written and practical article on "Bed sores in the Insane," and on the "Head-dress of Pauper Lunatic Men," and to various leading introductory papers that have appeared, from time to time, on subjects of immediate interest. Dr. Arlidge has published in the journal a series of papers "On the Examination of the Brain after Death," well worthy of the student's attentive reading. We all know how loosely, slovenly and carelessly the brain is often examined after death. It therefore behoves all occupied in these delicate and important investigations, to consider well the rules laid down by this physician for the guidance of those engaged in the study of cerebral pathology.

Dr. Boyd's communication on "Cholera" is valuable; but is it not too elaborate for a special periodical of this character? The essay occupies the greater part of one number of the journal. Would it not be better for the future to avoid publishing papers of such length, unless directly bearing upon some point of practical value relative to the organization of asylums or treatment of insanity? The short notices of new publications are characterized by a liberal spirit of

criticism, and the works selected for review are, with one exception, chosen with judgment and good taste. The exception to which we refer is a work on "Nervous Diseases," with the name of Dr. Maddock on its title-page. An *ad captandum* publication like this is unworthy of notice in the columns of a scientific journal. The book is evidently written for commercial purposes, and does not contain one point that should redeem it from the hands of the butter-merchant or trunk-maker. When we have so much to commend in Dr. Bucknill's editorial management we regret to be obliged, from a sense of duty and justice, to view any matter in a light different to that in which he has himself discussed it. In Nos. 6 and 7 of the journal Dr. Bucknill has considered it necessary to animadvert strongly on Dr. Simpson's management of the Lunatic Asylum for the North and East Riding of Yorkshire, in reference to the use of the milder forms of mechanical restraint under special and pressing circumstances.

The Commissioners in Lunacy, in their official entry made after a careful inspection of this public asylum on the 18th of March, 1854, refer to four cases, in the treatment of which Dr. Simpson conceived it to be his duty to apply, temporarily, mechanical restraint. In a subsequent part of their report they observe—

"No material alteration has taken place in the general arrangement of the institution since the visit of the Commissioners in June last; but the whole establishment is now on so steady and satisfactory a footing, that the details of its daily management are carried on with great ease and regularity, and we did not observe anything as to which we could suggest any change likely to be useful."

Now, Dr. Bucknill takes grave exception to this laudatory paragraph, and cannot conceive how the Commissioners can say, that they "did not observe anything as to which we can suggest any change likely to be useful," when one of the female patients had, at the time of their visitation, in consequence of her extreme violence, "her hands tied behind her by means of a pocket-handkerchief, and, in three other cases, the spencer had been occasionally employed to prevent acts of violence and destruction." It is not our intention to go in detail into the merits of the matter in dispute between Dr. Simpson and Dr. Bucknill. Dr. B. does not think this establishment can justly be held up as a "pattern institution," or be entitled to the eulogy of the Commissioners, as long as the patients are subjected to any amount of mechanical restraint. Dr. Simpson's very temperate reply to Dr. Bucknill's editorial criticism is published in No. 7 of the *Asylum Journal*, and is well worthy of perusal. Ranking, as we do, among the moderate advocates of a partial use of mechanical restraint, Dr. Bucknill cannot expect that

we should take *his* view of the matter in dispute. We can conceive an institution for the treatment of the insane to be a "pattern one," and fully entitled to eulogia similar to that bestowed upon Dr. Simpson by the Commissioners, in which mechanical restraint and seclusion are "occasionally" used for the treatment, safety, and care of its unhappy inmates.

With the exceptions previously referred to, it affords us, personally, much gratification to speak in the warmest terms in praise of Dr. Bucknill's editorial exertions. We can appreciate the difficulties with which he has had to contend, and are ready to make great and liberal allowances for any slight deviations from what we conceive to be the boundaries of legitimate criticism. We propose, from time to time, to bring this journal under the notice of our readers, and when we have more space at command, to quote extensively from its columns.

ART. VI.—FRENCH PSYCHOLOGICAL LITERATURE.*

IN a late number of this journal, we had occasion to show, that whatever merit there may be in having introduced to the notice of British medical practitioners the so-called "Non-restraint" system of treatment in mental disease, is undoubtedly due to Dr. Charlesworth, and not to Mr. Gardiner Hill, by whom the honour has been vociferously claimed. We, at the same time, endeavoured to name the true originator of the humane views which, at the present day, govern our management of lunatics. We claimed for Pinel all the glory of the revolution that has since his day transformed the lunatic asylum from a cage or a dungeon, to a drawing-room or library—a revolution that has opened the doors of the cells of incurables, and let in the messengers of mercy carrying health and sanity in their hands—a revolution that has, within less than half a century, left nought but historic trace of the horrors and cruelties which were the ordinary fate of the inmates of asylums. And we thought we had but done honour to whom honour was due; the article, however, before us, informs us that we were not correct in our adjudication. M. Brierre de Boismont attributes the origination of this reform movement to a physician named Daquin, who forty years ago died at Chambery; and what Brierre de Boismont asserts is not to be lightly disregarded.

"The question of priority," remarks M. Brierre de Boismont, "is one of great importance in the interests of humanity, but instead of disputing thereon, the first thing to be done is to collate and compare the writings of both. Daquin published, in 1791, a work entitled, "A Medico-philosophical Treatise upon Insanity." In 1801, Pinel

* Annales Medico-Psychologiques. Janvier, 1854.

published his *Medico-philosophical Treatise on Mania*—an interval of ten years thus separating these authors.

Daquin asserted that it was possible to treat this disease by moral, rather than by physical agencies. One of the first reforms demanded by him, was the abolition of the dungeons in which the insane were then incarcerated. "Rare and strange animals," he observes, "are carefully tended in their cages, and supplied with all they require; the unfortunate lunatic is left in culpable neglect." He never ceased to insist upon the abandonment of chains, cells, &c., &c. He incessantly urged that the continued imprisonment in ill-ventilated cells, perpetuated or irrevocably fixed the mental disorder of those who had otherwise, by better treatment, been restored to *réason*. Daquin not only preached these reforms, but so far as lay in his power, he put them into practice; but unaided, he could in his day effect little, and that little again vanished after his death, until Pinel's benevolent and energetic mind carried on towards ultimate success the mighty change, with which his name must ever be associated.

Coercion, Daquin maintained, was only useful in the milder cases. "What is the use," he observes, "of having recourse to mechanical restraint when so celebrated a physician as Cullen avowed that he knew of no means of coercion that were at once easy and salutary." Daquin further urged improvement in diet, fresh air, exercise, occupation, as remedial measures of the first importance; and he enforced the advantages of mild behaviour and gentleness, mingled with firmness of deportment, towards the insane. Moral, rational treatment was the principle he never ceased to enforce. In all the points here referred to, are to be found the germs of the great reforms subsequently accomplished by Pinel, Esquirol, and others in this country.

Although the character of Pinel is granted by M. Brierre de Boismont to place him above suspicion of plagiarism, it seems improbable that Pinel should not have been aware of the writings of Daquin. At the same time, there is little doubt that similar views had originated in the mind of each, independently of any suggestions or information derived from the other. Daquin was the first to call attention to existing atrocities, and to attempt the reform required; he was the author of a method which has finally triumphed, but unaided, without hospital, pupils, without a press, or other auxiliary, he could do no more than enunciate doctrines which Pinel developed, by the help of all the advantages of one of the largest hospitals in Europe, with all the authority of the chief of a great school, with the advantages of intelligent aid, and at a time when the strongest disposition for a change of all established institutions affected the public mind. With all these favourable conditions, Pinel accurately interpreted and

elaborated the noble sentiments of Daquin. The priority as to date rests indisputably with Daquin, but the more philosophic mind, the more energetic will, in a more propitious age, seized and improved opportunities which had not been granted by Providence to Daquin.

It is not credible, M. Brierre de Boismont urges, that such a work as that of Daquin could have been published in France, and have remained unknown to Pinel, who quotes so many other authors, ancient and contemporary. It is still further matter of astonishment that the same silence should have been maintained in his edition of 1809, in the *Clinique de Salpêtrière*, 1807, and in the six editions of the *Nosographie*, of which the last was published in 1818, although Daquin had dedicated his second edition to Pinel in 1804, five years before the publication of the second edition of Pinel's *Traité médico-philosophique sur l'alienation*.

"Can it be true," most pointedly asks M. Brierre de Boismont, "that there is in the heart of the most illustrious men a secret corner in which they hide the weaknesses of our nature; and must we pronounce, among these weaknesses, the impossibility of pronouncing the name of a rival, or, as it has been justly denominated by a modern author, *la conspiration du silence*? We withhold reply, but refer to the facts now related."

Researches on Cretinism, by M. Baillarger.—The author, in the first place, examines the definitions of Cretinism given by various writers, and compares these with the recorded descriptions, by different observers, of the condition to which the name *Cretinism* is applied.

Two principal opinions have been enunciated; the one consisting in the assimilation of this state with that of idiocy, from which it is alleged to be separated only by certain accessory and unimportant characters; the second opinion regards Cretinism as a distinct malady.

M. Baillarger, in order to arrive at satisfactory conclusions on this question, has visited, during several months, the districts in which the malady prevails. The result of these researches, carried on in the Pyrenees and Alps, is, that Cretinism is to be defined as an "incomplete, irregular, and, most frequently, very tardy development of the organization;" and is, therefore, essentially different from endemic idiocy.

The Consequences of Epilepsy.—The observations here referred to are extracted from a work in the press on Epilepsy, by M. Delasiauve. The consequences treated of, in this place, are those dependent on the general course of the disease, or its complications. These are enumerated, and described with reference to the primary malady, at the same time illustrated cases of the several complications are given. Among those which are noticed, are, apoplectic and inflammatory

congestion, mania, stupidity, delirium, paralytic dementia, and idiocy.

We quote parts of the author's observations on *stupidity* as a consequence or complication of epilepsy. It may be superfluous to state, that this is a mental condition frequently met with independently of epilepsy, presenting simply a constitutional dulness and slowness of ideas, weakness of memory, confusion in reasoning, and indecision of character.

In its higher degree, epileptic stupidity has all these defects in an exaggerated form approaching to the state of idiocy. The intellects impaired, conversation impossible, from want of clearness of thought, and from inability of utterance. The patient obviously comprehending what is addressed to him, his countenance expresses all the intermediate gradations from dulness to stupefaction. This expression, observes M. Delasiauve, does not ordinarily indicate feelings of depression, but simply of suspension of cerebral action. It is intelligible how, under such circumstances, violence may occasionally be manifested, according as the patient is under the influence of sinister or automatic impulses. The intensity of this stupidity will vary with the progress of the original malady. With its subsidence, the intellectual powers may clear up and regain their former activity. This form of mental malady is more persistent than mania which results from epilepsy.

The following instance is given by the author:—

A youth was admitted into the Bicêtre, presenting the characters here described. He was a miller, had arrived from the provinces to be present at the festival of the 15th August in Paris. He was a mere automaton, could not tell whence he came, whither he was going, what his country was, where he then was, nor could he express any ailment. His countenance was inexpressive, as his mind was without thought, and although exhibiting a slight tinge of melancholy, he manifested no sentiment of chagrin or fear. In about eight days this chaos of the intellect seemed to clear up a little, after a succession of epileptic seizures.

M. Baillarger regards delirium tremens as connected with this form of stupidity, from its resemblance to the state of inebriety; the reaction giving rise to automatic impulses, which take their direction from sensorial illusions regarding surrounding objects. The hallucinations are generally of a sinister aspect, such as the supposed presence of assassins, robbers, spectres, &c.

M. Delasiauve further enters into a full consideration of the allied forms of mental derangement; as well as the other consequences of epilepsy above enumerated.

Monomania, in relation to the Criminal Law.—M. Victor Molinier

has attempted in some degree to reconcile the discrepancy which so often occurs between legal and medical opinion upon the state of mind in criminals; a difference arising, according to M. Molinier, from the inquiry not having been made with a due regard to the respective domains of law and medicine; the latter, he urges, has merely to determine the fact of the existence of insanity—the former has to determine whether, at the time of the commission of a crime, the offender was, from his knowledge of right and wrong, responsible for his actions.

Herein, however, is the point of difficulty which M. Molinier has not quite cleared away.

Monomaniacs, M. Molinier urges, are aware when they commit a crime; they can make their election between the observance of the laws and the punishment of their violation; between the risk of the latter and the indulgence of an impulse originating in unrestrained passion or ill-regulated affections. The difference between the monomaniac and the culprit is only one of degree of moral depravity. To hold any other view, the author holds, is to destroy the free will and responsibility of man, and abolish the bulwarks and protection of society.

The doctrine here enunciated betrays rather the strong arm than the strong argument.

Legal Medicine.—In this department of the journal, M. Morel relates a case of feigned insanity, which was detected, and afterwards confessed by the culprit. Also, the history of a man who had violently torn out his wife's eyes, and concerning whose mental condition the opinion of M. Morel was required. This man had for many years been a good husband and a good father, industrious as a workman, and of excellent general character. Under the influence of derangement of his health he had become hypochondriacal, suspicious, and jealous of his wife; his delusions had been aggravated by illusions of the senses of sight and hearing—and actuated by these erroneous impression he had committed the violence already mentioned, with the intent at the moment to have committed actual murder.

In the *Therapeutic Report*, or extracts from other journals, we find statements of the beneficial effects of belladonna in neuralgic affections, by M. Sandras; of the successful employment of manganese in chlorotic affections, by M. Stoeber; of the serviceable administration of the fumes of nitrate of potash in asthma, by M. Trousseau; the mode of administration of the last-named remedy consisting in the saturation of paper in solution of the salt, and its ignition beneath the nostrils of the patient.

M. Recamier gives his statement of the success attending the use of cold affusion in puerperal convulsions. M. Aussaguel is here cited

as disapproving of venesection in apoplexy. The advantages of the inhalation of chloroform in delirium tremens is quoted from Dr. Pratt's paper in the *American Journal*. A case of general paralysis, presenting intermittent characters, is reported as cured by sulphate of quinine.

The Report of Proceedings of Learned Societies is occupied with the discussion on monomania, at the *Société Médico-Psychologique*, May 30th, June 27th, July 25th, and October 30th.

In the *Review* department we find notices of the following works:—

“On Spirits, and their Fluid Manifestation,” by M. le Marquis Eudes de M——; of which work the reviewer says—“I have read this book through from one end to the other, and my curiosity has not flagged for one instant. Its strange title is not a mere catch, as is too often seen on the covers of books. The text is as strange as the title. Not a shade of an artifice throughout. Here is *naïveté*, not wanting learning: moreover, here is a rare courage, the courage of self-opinion, which, bestowing a sort of heroic attitude upon an eccentric thought, elicits from the most hostile reader sympathy and respect. Not in our own age, beyond the strife of party, have we met with a writer who attacks with such aggressive serenity, or with a stronger faith in sarcasms, the scorn of what is called common sense. As if by a single blow to set at defiance all sneers and shrugs, the author has presented what he modestly terms his memoir to the Academy of Moral and Political Science, being the most competent tribunal, as, from the nature of its pursuits, it is less averse to separate the supernatural from sciences of observation.”

The object which the Marquis has in view is, it appears, to demonstrate the presence and material intervention of spirits in the affairs of this world; and that their office is to worry poor humanity, and to augment its already numerous tribulations. These spirits, says the Marquis, will interfere either spontaneously, or by voluntary or involuntary invocation; spontaneously in certain mental or nervous affections, or, in the language of the author, “in hallucination and mysterious perceptions, in possession and prophetic voices, in mysterious neuropathies;” by voluntary invocation, in sorcery, magic, &c.; by involuntary invocation, in mesmerism, animal magnetism, spirit rappings, table-turning, &c.

The precise nature and characters of these fluidified spirits are not here recorded.

We need scarcely further to occupy our space with such speculations, which, indeed, to our common sense, would have been deemed to have been the production of the inmate of some asylum.

Sauvons le Genre Humain! such is the title of a work by M. Victor Hennequin; another exposition of *Fourierism*!!

The next publication brought under consideration is that of Dr. Hubert Valleroux, *Upon the Actual Condition of the Deaf Mute and the Blind*. Upon the nearest calculation, the author informs his readers, there are in France 27,286 deaf and dumb persons, or 1 in every 1356 inhabitants. This estimate M. Hubert believes to be below the truth. The various modes of instructing these, as well also the blind, are examined by M. Hubert, who proposes an entire new organization of the present system of education for these unfortunates. The most important feature of the scheme is that it proposes to educate the deaf and dumb and blind to agricultural pursuits, and, therefore, requires that the institutions for their benefit should be established in the country.

The Hygiene of Body and Soul.—M. Mar. Simon, known to us as the author of *Deontologie Médicale*, has published a work upon temperance, under the above title, and which, it appears, according to the reviewer, enforces religious motives also for the avoidance of the vice of drunkenness.

Notices of the Reports of Asylums, French and Foreign, conclude this portion of the journal.

ART. VII.—THE HISTOLOGY OF THE BLOOD IN THE INSANE.

By W. LAUDER LINDSAY, M.D.,

Late Assistant Physician Crichton Royal Institution, Dumfries.

THE subject of the structural alteration of the blood in insanity is one which, so far as I am aware, has hitherto attracted little or no attention in this country, either among psychological physicians in particular or medical observers in general. I hope, however, to show, in the following remarks, that it is one specially worthy of investigation, aided by all the light of modern discoveries in histology, chemistry, and pathology: not, perhaps, as elucidating the mysteries of morbid conditions of the mind, or its organ, the brain, but as powerfully illustrating the laws of general and special pathology. Researches of this nature will tend greatly to break down the unfounded prejudices still existing in the public mind regarding the special nature of insanity, and to propagate, among the profession as well as the public, more correct opinions of the mutual relations of healthy and morbid states of mind and body, and more particularly of the reaction of physical disease on mental phenomena. It will hereby be found that insanity is much more a corporeal disease than is at present believed, or, at least, is more intimately connected with, or inseparable from, various of the ordinary physical diseases to which human flesh is heir.

The following remarks are founded on the results of a microscopical examination of the blood in 236 insane patients, and in thirty-six officers and attendants in the Crichton Royal Institution and Southern Counties Asylum at Dumfries.* These asylums are beautifully situated on the brow of a hill,

* I gladly avail myself of the opportunity of expressing my deep obligations to Dr. Browne, the present superintendent of these asylums, for permitting me to make and record the following observations; and to Mr. Aitken, late house surgeon of the Southern Counties Asylum, for his courtesy and kindness in assisting my investigations among his patients.

which slopes gently towards the Nith: the panorama they command is one of great and varied beauty; though sheltered from certain winds, they are freely exposed to the sea-breeze, which sweeps up Nithsdale from the Solway Firth; the grounds are commodious and attractive; the sanitary arrangements are excellent; and the internal economy is at least equal, if not superior, to that of any similar institutions in the kingdom. The former asylum was built some fifteen years ago, and contains an average number of 120 patients, belonging to the middle and higher classes of society. Many of them have been nurtured amid all the comforts, if not the luxuries and elegancies of life, and are highly educated and accomplished; the others have at least moved in respectable society, and have received all the advantages of modern education. They are still surrounded, so far as personal and general safety and the discipline of a large establishment will allow, with most of the comforts of home: they have frequent or daily open-air exercise, but their occupations and amusements, from their previous education and habits, are *sedentary* and *intramural*. The latter is a model of a pauper asylum, having been recently built, with all the most important modern improvements, under the immediate supervision, and with the advantage of the skilled experience, of Dr. Browne. It contains an average number of 180 patients, chiefly from the neighbouring counties of Dumfries, Kirkcudbright, and Wigton; many of them are not paupers, in the ordinary acceptance of the term, but belong to the middle classes, have moved in good society, and received excellent, some of them university, educations, and have been placed there in consequence of the inability of friends to pay higher rates of board. The majority of the males are engaged daily in *active* and *open-air occupations* and amusements, while the females chiefly engage in needlework in a large commodious work-room.

The two establishments possess an ample staff of officers, attendants, and servants, most of whom, previous to their entering the service of the respective asylums, have been engaged in various rustic occupations, or have worked at various healthy trades in country districts. Many of them—females as well as males—are remarkably tall, athletic, and handsome; most of them are in robust health. A few, however, are not exempt from the cachexies and diseases so common in all ranks of society: various forms of scrofulous disease in the males, and of uterine affections in the females, being the chief morbid conditions.

At the time of my experiments (and speaking generally) the inmates of both asylums were in good physical health. But, in a community of such a size and constituted of such varied elements, and bearing in mind that insanity is rarely, if ever, quite unconnected with bodily disorder, it would have been unique and unnatural had there not existed a considerable amount of the same functional or organic diseases to which the sane are liable. It appears advisable shortly to catalogue the chief physical complications, as well as the classes of mental alienation, in the patients whose blood was examined, in order to place us in a more favourable position for contrasting the structural alterations in the blood corpuscles in the insane and sane, under the same or different circumstances regarding the presence or absence of these physical complications or diseases.

I. Cachexies and general systemic affections:

Strumous diathesis.

Hæmorrhagic diathesis.

Anæmia.

Plethora.

Syphilis.

II. Diseases of the skin and cellular tissue:

Cutaneous eruptions—acné, scabics, psoriasis.

Carbuncles and boils.

Erysipelas and erythema.

Ulcers and abscesses, connected with struma, syphilis, varix, &c.

- III. Diseases of the digestive system and alimentary canal:
 - Dyspepsia—in all its usual forms.
 - Chronic vomiting.
 - Obstinate constipation.
 - Diarrhœa—simple, chronic, dysenteroid.
 - Dysentery—acute, chronic.
 - Cholera.
- IV. Diseases of the respiratory system:
 - Phthisis—especially in its earlier stages.
 - Bronchitis. Pleurisy.
 - Asthma. Influenza.
 - Pneumonia. Pneumo-thorax and hæma-thorax.
- V. Diseases of the circulatory system:
 - Heart disease—functional and organic.
 - Tendency to syncope.
 - „ apoplexy.
- VI. Diseases of the liver and kidney:
 - Hepatitis—chronic.
 - Diabetes—mellitus.
 - „ insipidus.
 - Oxaluria and other morbid conditions of urine.
 - Anasarca—renal.
- VII. Diseases of the nervous system:
 - Paralysis—in various degrees.
 - Hysteria, catalepsy.
- VIII. Diseases of the genito-urinary system:
 - Spermatorrhœa.
 - Gonorrhœa—gleet.
- IX. Diseases of the uterine system:
 - Menorrhagia, amenorrhœa, leucorrhœa.
 - Polypus.
- X. Diseases of the bones and joints:
 - Rheumatism.
- XI. Diseases of the lymphatic system:
 - Bronchocele.
- XII. Diseases of the organs of special sense:
 - Ophthalmia. Strabismus.
 - Otorrhœa.
- XIII. Surgical diseases:
 - Fractures—skull, sternum, ribs.
 - Dislocations—tibia.
 - Spinal curvature.
 - Scrofulous diseases of the bones.
 - Hernia.
 - Fistula in ano, hæmorrhoids.
 - Emphysema of cellular tissue.

The types or phases of insanity in the patients were the following:—

- | | |
|---|---------------------------------|
| I. Mania: simple or general, acute or chronic, periodic, remittent, &c. | |
| Religious. | Kleptomania. |
| Erotomania. | Pyromania. |
| Satyriasis. | Puerperal. |
| Nymphomania. | Dipsomania. |
| Homicidal. | Complicated with epilepsy. |
| Suicidal. | " " dementia. |

II. Monomania:

Religious.
Joyous, sad.
Superstitious.
Of fear.

Homicidal.
Suspicious.
Proud.
Of Discontent.

III. Melancholia:

Religious.

Suicidal.

IV. Dementia.

V. Amentia.

VI. General paralysis; especially in the early stages.

VII. Moral insanity.

It is scarcely necessary to observe that in none of the patients could any one of the above types or phases be said to exist in a pure and uncomplicated form: they were usually combined in different forms or degrees.

The following numerical table will show concisely the proportional number of patients and attendants in the two asylums, whose blood was examined:

	ATTENDANTS.	PATIENTS.
Crichton Institution	Male . . . 10	61
	Female . . . 2	39
	— 12	— 100
Southern Counties Asylum	Male . . . 17	90
	Female . . . 7	46
	— 24	— 136
	36	236
		36

Total . 272

Of the 236 cases in both asylums, the following was the proportion belonging to the great types or classes of mental alienation just enumerated:—

	PER CENT.
Mania	42.3
„ with epilepsy . . .	2.7
Monomania	11.8
Melancholia	12.9
Dementia	25.4
Amentia	1.6
General paralysis . . .	3.3
	100.0

Of the 36 attendants in both asylums, 75 per cent. were healthy, and 25 were affected with some of the diseases previously referred to.

In these classes of persons, I was afforded an opportunity of—

I. Studying the histology of the blood in the insane of both sexes, of all ages,

a. from all parts of Britain, belonging to all classes of the community, whose previous education, habits, and diseases, had been of the most diversified kind.

b. In all the more ordinary, as well as in many of the rarer, forms of mental alienation.

c. In various forms of insanity, complicated with every kind and degree of physical disease.

d. In a limited number of the sane, also variously circumstanced regarding their physical condition.

- II. Contrasting the structural condition of the blood in various great
- a.* divisions of the insane, *e.g.*, the rich and pauper insane.
 - b.* In various forms of mental alienation, *e.g.*, mania and general paralysis.
 - c.* In various physical complications accompanying the same, or different, forms of insanity, *e.g.*, phthisis and cholera.
 - d.* In the healthy and the diseased insane.
 - e.* " sane and insane.
 - f.* In the sane and insane affected with the same physical diseases.

The blood examined was, in almost all cases, that drawn from the point of some of the fingers by the prick of a needle. In one case, where the patient refused to submit to this slight operation, it was taken from some coagula in a scrofulous abscess of the neck. From the character of the patients, the examination was necessarily superficial and hurried; but the results, though in many points unsatisfactory, were sufficiently distinct to indicate certain general facts regarding the relative condition of the blood in the insane and sane. As a general rule, the insane are extremely bad subjects for such experiments. This applies, of course, in different degrees, to patients labouring under different forms of insanity. They are extremely sensitive, restless, and suspicious of operative interference, even of so slight a nature. Many obstinately refused to allow their fingers to be pricked. Some did so from a firm conviction that a deep-laid conspiracy against their lives or welfare lurked under the cloak of apparently simple experiment; others simply objected to become tools of experiment or amusement; some declined on the plea that in their greatly debilitated condition they could ill afford to spare even a single drop of blood; others lacked courage to submit to the operation; some demanded full explanations of the motives which led to my making the singular request of allowing their finger to be pricked by a needle; in others this formed the keynote of their delusions, delirium, or vituperation, for days or weeks after the experiment was attempted in them. On the other hand, many, who could not appreciate the objects of experiment, submitted cheerfully, merely from a wish to please their medical attendant; others—chiefly cases of confirmed dementia or of deep lethargy—were perfectly passive, freely permitting any kind or amount of experimentation; some presented their fingers, under the impression that, from the single drop of blood, the state of their constitution, the chances of cure, and the period of their removal, could infallibly be predicted; others from curiosity to see the appearance which their own blood, or that of their companions, presented under a microscope; many, especially of the educated classes, comprehending at once the objects of experiment, cheerfully submitted, and evinced the liveliest interest in the microscopical appearances, which, in all cases where the patient was in a condition to appreciate them, were demonstrated and explained; some carried this laudable curiosity to a great extent, begging most earnestly not only to see their own blood at different periods of the day, but that of fellow-patients and attendants, evidently strongly impressed with the belief that between their own blood and that of companions who exhibited most different traits of character or conduct, or between that of insane patients and sane attendants, there should exist a perceptible difference. On various occasions, I was obliged to demonstrate the condition of my own blood under the microscope, to satisfy the curiosity thus awakened. There was a marked difference between the two asylums in the readiness with which both patients and attendants submitted to experiment. In the Crichton Institution, a much larger proportion submitted, and with greater cheerfulness and readiness, than in the Southern Counties Asylum, where a great amount of persuasion and explanation was frequently necessary. It may, at first sight, appear surprising that the experiment should have been more successful among the rich than the poor insane,—among persons of refined habits, and many of them

of delicate constitutions, than among rough, hardy artisans and field-labourers. The difference I attribute entirely to the difference in the *education* of the respective classes; to which, also, I attribute the fact that the patients in the Crichton Institution submitted more readily and cheerfully than the attendants. It is noteworthy, moreover, that, among the higher class patients, a much larger proportion of ladies than gentlemen offered themselves as the subjects of experiment. The cause of this difference appeared to be that curiosity strongly predominated in the former. They evinced great anxiety to know the difference in the condition of the blood between the sane and insane, the diseased and healthy. The superior courage with which they bore the operation, simple as it was, cannot, however, be explained on the same ground. The classes of cases most readily experimented on were amentia, confirmed dementia, melancholia, and general paralysis; those least readily, mania and monomania. The microscope used in the investigations was one of Næchet's (of Paris); the magnifying power varied from 180 to 380 diameters,—most frequently the former. In consequence of the difficulty to which I have already adverted,—of prosecuting such researches among the insane,—I was unable, in the majority of cases, to examine the blood of the same individual more frequently than once; and as I was obliged to do so when favourable circumstances in each individual case presented themselves, my examinations were made at irregular periods of the day. I was thus prevented from making other than a qualitative and rough examination,—from ascertaining the variations in the condition of the blood according to the period of the day (in connexion with the digestion of food, &c.), sex, age, and type of disease, mental and bodily, and from accumulating similar data on which to found general deductions,—which I should, under more favourable circumstances, have endeavoured to do.

When drawn, the blood, in the majority of cases, presented to the naked eye the characters of healthy blood; but in a certain number of cases it varied in,—

1. Colour, granularity, and dulness;
2. Density or consistence;
3. Coagulability;
4. Readiness of its flow;
5. Rapidity of separation of the red globules and fibrin; and
6. The apparent relative amounts of serum and crassamentum.

It sometimes possessed a bright orange-red tint, or presented various shades of crimson, purple, or brick-red. In some cases, there was little or no tendency to coagulation, the crassamentum being very loose and imperfect, or the serum maintaining a distinctly red colour, the crassamentum absent, or nearly so, and the red globules forming a pulverulent or granular basis of a dull brownish-red colour. In this condition it resembled blood drawn from the dead body twelve or eighteen hours after death, in which the fibrin appears either to be deficient in quantity, or to have been retained in the form of coagula in some of the vessels. In many of these cases the blood appeared to be very fluid; in others it was as decidedly the reverse. Sometimes the red discs rapidly became agglomerated into rouleaux, forming distinct red streaks or stræ in the straw-coloured serum; in other cases, not the least trace of this phenomenon was visible. Considerable variety also existed regarding the readiness with which blood was drawn, and the amount thereof; the depth of the needle-wound, and the other circumstances of experiment, being, as nearly as possible, in all cases, the same. This was doubtless due, in great measure, to variations in the thickness of the skin and vascularity of the points of the fingers in the rich and poor insane, to anæmia in some cases and plethora in others, and similar circumstances, which do not immediately or necessarily enter into the subject of the present remarks.

In a large proportion of cases, both kinds of corpuscles—red and white—presented their normal characters under the microscope, but in many there

existed certain deviations therefrom, which I shall briefly detail under the following heads:—

- I. Variations in relative number.
- II. " colour, granularity, opacity.
- III. " size.
- IV. " form.
- V. " tendency to agglomerate.
- VI. " reaction of acetic acid.

I.—*Red Corpuscles*.^{*}—*Number*.—I had no means of accurately estimating the relative proportion, compared with the normal standard, present in each or any case, but from the large proportion, or excess, of white corpuscles found in many cases, and from the general appearance of the blood, it is highly probable that there was frequently a more or less marked diminution in the relative number of red discs, especially in certain cases of anæmia and chronic debilitating disease.

Colour.—They were sometimes very dark, chiefly when of small size, granular on the surface, and irregular in shape; more rarely, and chiefly when of large size, they were light, and of a pale yellow colour. In the latter cases, the central depression was frequently very indistinct, or altogether absent; and in these circumstances the corpuscles resembled pellucid globules. By some observers (*e.g.*, Virchow) pale bodies, having these or similar characters, are regarded as defunct blood discs incapable of performing the functions peculiar thereto, and in particular of acting as absorbers and carriers of oxygen to the tissues. In support of this opinion, it has been lately found that frogs, whose liver had been excised, lost the power of respiring carbonic acid and of absorbing oxygen in proportion as the pale clouded globules increased in number.† Granularity was most marked when the corpuscles were of their normal size, or less. When the light-coloured and larger corpuscles were granular, they were almost indistinguishable from the white corpuscles. The granules were sometimes aggregated in such a way as to resemble nuclei. Many of the light-coloured globules, when thickly agglomerated in masses, became much darker, showing that the variations in colour, in many cases, depended, to a great extent, on the effects of light.

Form.—Sometimes they were irregularly angular, presenting various resemblances to squares, rhombs, or triangles; by irregular bulgings they became cymbiform, ellipsoid, spheroid, globular, and curved in various ways; and by elongation they assumed fusiform, pyriform, caudate, and staff-shaped appearances. Sometimes they resembled grains of wheat, having a central raphé—apparently a line of puckering. The margin frequently presented a notched or serrated appearance, due, seemingly, to collapse of the walls. This was most frequently noticed in discs which were at the same time small and granular; it existed rarely in those of unusual size, and it was seldom found in those having an elongated form. The central depression was marked in various degrees; sometimes, as in the embryonic blood corpuscle, it was absent. Occasionally, the circumference of the discs presented the appearance of a more or less perfect double contour. I have noticed appearances similar to some of the above in the blood of cholera.‡ Most of these forms have been described by various observers as indicative

^{*} As in many cases blood was obtained in so small quantity as to necessitate dilution, and in order to insure uniformity in the results, water was, in all cases, added under the microscope.

† Moleschott's Experiments. Müller's Archiv, or British and Foreign Medico-Chirurgical Review, Oct. 1854.

‡ Edinburgh Monthly Journal of Medical Science, Aug. 1854; p. 133.

of the decay and death of the blood corpuscles; and they regard such a condition as of great pathological importance, bearing on the etiology and pathology of various diseases. These modifications of the common red disc, the supposed products of decay or disorganization in debilitated constitutions, appear to be produced by endosmotic and exosmotic changes dependent on the loss of equilibrium or affinity between the corpuscles and the liquor sanguinis. Other authors assert that many of the above forms, though closely resembling the modifications resulting from incipient or advanced disintegration, are essentially distinct therefrom; but have, nevertheless, an equally significant pathological importance. Frequently I noticed that, while a comparatively few corpuscles in a particular part or parts of the field of the microscope were thus altered in character, the remainder were perfectly normal in appearance. This renders it possible, or even probable, that many of the changes in the appearance of the red discs may have been produced by physical causes operating at the moment, *e.g.*, unequal pressure between the glass-slides, unequal dilution with water, &c.

Size.—I have already mentioned incidentally the variation in size. In some cases they were so small and light coloured as to resemble oil globules; in others they equalled or exceeded in size the white corpuscles.

Tendency to unite into Rouleaux.—Instead of rouleaux, the corpuscles often became aggregated into irregular masses, having a dark colour, from their density; at other times there appeared to be no tendency to aggregation of any kind. There was also considerable variation in the rapidity with which such aggregations, whether in rouleaux or irregular masses, broke up or became dissolved.

Reaction of Acetic Acid.—No abnormal peculiarities were observed.

II. *White Corpuscles.*—*Relative number.*—In a comparatively large proportion of cases they were present in excess; in some cases in very marked excess. In many cases the excess may have been only apparent, and really due to deficiency of the red corpuscles in anæmic debilitated patients, labouring under chronic and exhausting affections. In most of these cases they separated gradually from the red discs, and floated to the side of the field, where they appeared in groups of different sizes; they were seldom noticed adhering in any way to each other. This grouping appeared variously due, in different cases, to their lighter specific gravity, whereby they floated out from among the red corpuscles, or to their extrusion from, or repulsion by, the red, while in progress of agglomeration into rouleaux or masses.

It is necessary here to mention that I took no means of estimating quantitatively or accurately the proportion of white to the red corpuscles. I merely judged qualitatively, or in a general sense, of the normal or abnormal relation of these two kinds of corpuscle by comparing the microscopical condition of the blood in the sane and insane, healthy and diseased, persons who were the subjects of experiment. This mode of investigation was of course open to great inaccuracies and fallacies; but it will be found sufficient for arriving at the general results, which it is my object to enunciate. There is no good plan, of easy applicability, for estimating the relative numbers of red and white blood corpuscles in a given specimen of blood. Most elaborate micrometrical enumerations have been tried by Vierordt and other continental microscopists; but this means is so tedious and difficult as to be practically impossible. Professor Bennett has suggested that the best means to form an estimate is to observe the spaces or meshes between the rouleaux or aggregate masses of the red discs. But this mode of procedure is very fallacious. I have repeatedly failed to detect a single white corpuscle in this way, when I knew they existed in considerable numbers, and even in excess, and where I have subsequently succeeded in proving their presence by floating them out in water. Observers are very much divided as to what constitutes the normal proportion of the white

to the red corpuscles. For some time it has been generally held to be one white to every eight or ten red: but late experiments on the continent seem to prove that this is very erroneous.* The importance of the subject in connexion with these experiments will, I hope, be a sufficient excuse for very briefly mentioning a few of the results referred to. Donders and Moleschott state the average proportion to be 1 to 373. They found that in persons between two and a half and twelve years of age, the average proportion was 1 to 226; between thirty and fifty years, 1 to 346; in old men between sixty and eighty, 1 to 381; in females, after menstruation, 1 to 247; in females who had not menstruated, 1 to 405; and in pregnant women, 1 to 281. The white corpuscles increased after food, especially if rich in albumen, and diminished by fasting; they were increased also during menstruation and pregnancy.

Granularity and Opacity varied considerably; they were most marked where the corpuscles were not increased in size, or were smaller than normal.

Size.—Sometimes they resembled the red corpuscles in size; at other times they attained two or three times their normal bulk; in the latter case they were very pellucid, non-granular, and delicate.

Form.—Irregularities in the outline were comparatively seldom met with, and were more probably temporary and due to physical causes in operation during the microscopical examination, than permanent or structural changes. A large granular opaque nucleus was sometimes visible without the aid of acetic acid. It usually occupied nearly the whole cell; sometimes it was central, at other times more or less parietal; in the latter case the cell wall resembled a delicate vesicle or veil enveloping the nucleus.

Reaction of Acetic Acid.—This reagent usually rendered evident a large, granular, simple nucleus, or a double or triple nucleus, which was much smaller and seldom granular, though frequently opaque. The cell wall usually became very distinct, and sometimes swelled to a great extent round the nucleus. Occasionally the nucleus was as, or even more, distinctly visible before the addition of the reagent. Where the nucleus was visible on the simple addition of water, acetic acid generally rendered it only more granular and distinct. Where the double or triple nucleus was developed, the corpuscles closely resembled, and could not have been distinguished from pus cells. This condition of nucleus was chiefly noticed in small-sized corpuscles; the larger, granular, single nucleus in those of larger size. Sometimes the supposed white corpuscle proved, on the addition of acetic acid, to be only the nucleus round which the cell wall was now developed as a very delicate pellucid vesicle.

The alterations which I have above shortly described were much more common among the inmates of the Crichton Institution than those of the Southern Counties Asylum. This is attributable, doubtless, not only to the influence of previous education and habits on the constitution of the patients respectively, but also to the essential difference in the occupation and amusements of the two classes; their passive, sedentary nature in the one, and their active, open-air character in the other. These conditions of the blood were not confined to the insane, for they occurred, to a less extent, however, in the sane. Nor did they appear to bear any relation, in kind or degree, to the type or class of mental alienation; but a connexion was traceable, both in sane and insane, with physical disease.

In estimating, however, the value of such structural changes in the blood in connexion with mental or physical disease in the insane, it is important to bear in mind the following facts *inter alia*. Many, if not all, of the above conditions have been found in other diseases; and it is probable they exist in many bodily states, which are not usually classified as distinct diseases. Variations in size of the corpuscles are known to be comparatively common in health as well as

* Donders and Moleschott. Schmidt's Jahrbuch, No. 6, 1854, or British and Foreign Medico-Chirurgical Review, Oct. 1854.

disease, in persons of all ages and of both sexes. The blood corpuscles very readily assume a great variety of form, temporary or permanent, from simple physical causes—*e.g.*, pressure, or addition of reagents causing endosmotic and exosmotic changes. The red corpuscles are well known to become wrinkled or puckered, and tuberculated or granular, after removal from the body and exposure. Changes in form and colour are frequently produced by the indirect action of medicinal agents which have been received into the system through the medium of the lungs or stomach, or by their direct application to the blood itself. Both white and red corpuscles are increased or diminished in number in many diseases; an increase or decrease of the one, however, may be merely apparent, and due to the decrease or increase of the other. A gradual transition of the red into the white corpuscles has repeatedly been traced in various affections; the red become granular, light coloured, and enlarged; and the white become flattened, non-granular and more opaque. The granularity and irregularity of the margin in the red discs has been variously attributed to puckering from simple desiccation; to the accumulation or adhesion of minute bubbles of common air or gases contained or developed in the blood; or to the adhesion of particles of fibrin.

These and similar considerations, which it is unnecessary here further to specify, are sufficient to indicate the fallacies and mistakes into which we are apt to fall in the investigation of such a subject. My observations have not been sufficiently extensive or minute to enable me to arrive at any very new or valuable results; still my present object shall have been fully answered if I can succeed in inducing observers, of greater experience and larger opportunities, to prosecute researches which I have but crudely begun.

I have appended a few tables of cases illustrative of the facts and fallacies above specified; they are interesting, as much on account of their negative as their positive evidence.

The following is a *resumé* of the chief general conclusions or results at which my experiments appear to warrant me in arriving—*viz.*:

- I. That the blood of the insane varies considerably in
 - a.* Colour, granularity, and dulness;
 - b.* Density or consistence;
 - c.* Coagulability;
 - d.* Relative proportion of serum, fibrin, and globules;
 - e.* The tendency of the red discs to agglomerate;
 - f.* Rapidity, readiness, and amount of the flow.
- II. That the *red discs* vary in *a.* size, *b.* form, *c.* colour, *d.* number, *e.* tendency to agglomerate.
- III. That the *white globules* vary in *a.* size, *b.* form, *c.* granularity, *d.* number, *e.* reaction of acetic acid.
- IV. That, in the blood of the insane, a *leucocythemic condition* frequently exists.
- V. That, in many cases, this condition may be more apparent than real, and due to a *deficiency in the amount of red discs*.
- VI. That there is no fixed relation between the kind or intensity of the above conditions, and the various forms or phases of mental alienation.
- VII. That there is, however, a certain relation between these conditions and the physical complications of mental alienation.
- VIII. That these conditions are not peculiar to the insane, but occur in the sane, under similar circumstances of physical disease.
- IX. That the blood is more altered in the insane than the sane, chiefly in proportion as *anæmia*, *struma*, and other physical states, are more common in them.
- X. That, contrasting the condition of the blood in the rich insane, with that

- in the poor insane, it is deteriorated, more frequently and to a much greater extent in the former.
- XI. That this is due, in great measure, to the essential difference in the education and habits in the respective classes: to the predominance of mental over physical culture in the higher classes; and to the predominance of physical over mental exercise in the labouring classes.
- XII. That, contrasting the condition of the blood in various forms of mental alienation, no alterations can be considered peculiar to, or frequent in, any one of these forms.
- XIII. That contrasting the blood of the insane with that of the sane, any structural alteration in either class is usually due to physical disease.
- XIV. That the physical conditions or diseases, both in sane and insane, in which the above structural alterations most frequently occur, are debilitated states of the system and general vitiation of the blood, resulting from long-continued and exhausting diseases, *e.g.*, anæmia resulting from phthisis, menorrhagia, or intestinal diseases.

TABLE I.

Cases illustrative of alteration of the blood-corpuscles, *in connexion with Physical Disease in the Insane.*

Sex.	Age.	Phase of Insanity.	Nature of Physical Disease.	Condition of Blood-corpuscles.
M.	47	General paralysis, epilepsy — Monomania of riches, kleptomania, mutilator. <i>Died.</i>	Anæmia, diarrhœa, dysentery. Said to have had enteritis.	Great increase of <i>white</i> .
...	50	Homicidal mania, dementia — Occasional abstinence.	Leucophlegmasia, dyspepsia.	Slight increase of <i>white</i> . <i>Red</i> —small, granular, irregular margin.
...	36	Dipsomania, partial dementia.	Delirium tremens, dyspepsia, chronic hepatitis, hypochondriasis.	<i>White</i> —slight increase. <i>Red</i> —dark, granular, irregular margin; some have the appearance of a double contour.
...	28	Confirmed dementia—Functions almost vegetative, dirty and degraded habits.	Struma, tendency to syncope and erysipelas, anæmia.	<i>White</i> —slight increase.
...	28	Mania, religious and erotic, strong hereditary taint.	Old fracture of skull, struma.	<i>White</i> —slight increase, small and very granular.
...	40	Confirmed dementia.	Renal anasarca.	<i>Red</i> —irregular in shape.
...	35	Chronic mania, with epilepsy.	Tendency to erysipelas.	<i>White</i> —slight increase.
...	19	Acute [recent] mania, 1st attack.	Phthisis, anæmia, great emaciation and debility, chronic diarrhœa [dysenteroid].	„ great increase.
...	45	General paralysis, 1st stage, dementia—Monomania of riches.	Pneumonia, fracture of ribs, cutaneous emphysema, diarrhœa, anæmia. <i>Died.</i>	„ slight increase.
...	30	Acute mania, with epilepsy.	Anæmia, diarrhœa, debauchery, dissipation.	<i>White</i> —increased, small, indistinct.
...	50	Monomania of pride.	Syphilis.	<i>Red</i> —alteration of shape.
...	40	Chronic mania, dementia.	Scrofulous ulcers and abscesses, anæmia.	„ „ „

TABLE I.—(continued.)

Sex.	Age.	Phase of Insanity.	Nature of Physical Disease.	Condition of Blood-corpuscles.
M.	50	Chronic mania, dementia.	Bilious attacks, diarrhoea.	White—increased.
...	45	Confirmed dementia.	Cutaneous eruptions, ulcers, strabismus.	Red—"indistinct," altered in shape.
...	40	" "	Dyspepsia, chronic vomiting.	Red—irregular in margin.
F.	60	Senile dementia.	Paralysis—Blind.	Red—irregular in margin, granular.
...	35	Confirmed dementia.	Scrofulous spinal disease, great distortion.	" "
...	47	Melancholia, religious, suicidal—Dirty and degraded. Hereditary taint.	Anæmia, hypochondriasis.	Red—light in colour, agglomerated in irregular masses.
...	45	Confirmed melancholia—Vanity, occasional abstinence.	Anæmia, dyspepsia [marked by frequent vomiting], oxaluria, intemperance.	White—great increase, small, granular.
...	35	Melancholia, paroxysmal mania—Occasional abstinence.	Strumous disease of tarsus and metatarsus, anæmia, emaciation. <i>Died.</i>	Red—altered in shape, agglomerated in masses.
...	35	Chronic mania—Indecent, degraded, very incoherent.	Anæmia, cholera. <i>Died.</i>	White—increased, small, granular.
...	30	Chronic dementia—Mute.	Strumous ulcers and abscesses.	White—increased, small, granular.
...	35	Puerperal mania.	Struma, anæmia.	Red—granular.
...	40	Partial dementia.	Chronic acné [inveterate].	White—increased.
...	35	Melancholia, paroxysmal mania.—Convalescent.	Struma, dyspepsia, bilious attacks, anæmia.	Red—altered in shape, granular.
...	28	Melancholia, paroxysmal mania—Dirty, degraded, indecent.	Phthisis [vicarious].	Red—altered in shape, granular.
...	55	Melancholia, mania.	Strumous abscesses, bronchocele, anæmia.	Red—altered in shape, irregular in margin.
...	40	Monomania [simple].	Anæmia.	Red—altered in shape, irregular in margin.
...	40	Chronic mania.	"	White—increased, large, granular, irregular in shape.
...	64	Melancholia.	Chronic diarrhoea.	White—increased, altered in size and shape, irregular in margin.
...	35	Chronic mania.	Tendency to dysentery.	Red—altered in shape.
...	25	Monomania of pride, erotic, mania paroxysmal.	Amenorrhœa, dyspepsia.	White—increased, small. Red—elongated, light in colour, agglomerated in irregular masses.

In the above Table, it will be observed that an abnormal condition of both

kinds of blood discs sometimes occurred in the same individual; that the morbid condition of the red discs was most frequently alteration in form; that of the white globules, simple increase in number; that in both the cases where there was a marked excess of white globules there was a great amount of physical disease, as well as a severe type of mental alienation; and that the same structural alterations occurred in the most opposite and varied forms of insanity and its physical complications.

TABLE II.

Cases illustrative of alteration of the blood corpuscles, *without the presence of marked Physical Disease, in the Insane.*

Sex.	Age.	Phase of Insanity.	Physical Condition.	Condition of Blood-corpuscles.
M.	45	Chronic mania, dementia, partial—Delusions.	Robust health, plethoric, occasional epistaxis.	White — increased; small, granular, hazy; very smooth margin.
...	26	Dementia, partial, congenital.	Robust health, florid complexion.	Red—granular, irregular in margin.
...	26	Dementia, partial, congenital.	Robust health, florid complexion.	Red—altered in shape.
...	28	Melancholia—Religious.	Healthy, though of delicate build.	Red—altered in shape, margin irregular.
...	80	Confirmed dementia, [senile].	Good health.	Red and white—altered in shape, margin and granularity.
...	45	Chronic mania.	" "	White—increased.
...	40	General paralysis.	" "	" "
...	64	Chronic mania—Delusions, vanity.	" "	" "
...	40	Chronic mania.	" "	White—increased, very granular and distinct.
...	30	Melancholia.	" "	White—increased and altered in shape.
...	35	Dementia.	" "	Red and white altered in shape.
...	30	Monomania—Religious.	" "	White—increased.
...	35	Dementia.	" " tendency to obesity.	Red—granular, hazy, irregular in margin.
...	35	Mania—Delusions.	Good health, robust, active.	Red—small, granular, margin serrated.
...	40	Chronic mania, dementia—Delusions.	Good health.	White—increased.
...	40	Monomania of suspicion.	" "	" "
...	35	Dementia, mania paroxysmal—Hallucinations, dirty, degraded, indecent, mutilator.	" "	Red—altered much in shape, [elongated, fusiform, &c.] light in colour; agglomerated in masses.
...	50	Mania, dementia.	" "	White—very granular, smooth margin, distinct.
...	55	Melancholia — Abstinence, [requiring artificial feeding].	" "	Red—altered in shape. White—increased, small, smooth in outline.
...	50	Mania—Religious.	" "	White—increased.

TABLE II.—(continued.)

Sex.	Age.	Phase of Insanity.	Physical Condition.	Condition of Blood-corpuscles.
F.	45	Monomania—Religious mania [nocturnal paroxysms.]	Good health.	<i>Red</i> —altered in shape, size, colour; margin irregular. <i>White</i> —increased, distinctly nucleated, very granular; resemble pus cells in reaction of acetic acid; altered in size.
...	45	Dipsomania—Vanity.	Good health, very stout.	<i>Red</i> —altered in shape; granular.
...	45	Confirmed dementia—Dirty and degraded to an extreme degree.	„ „	<i>White</i> — increased, small.
...	45	Kleptomania, paroxysmal mania.	„ „	<i>White</i> —increased, very granular. <i>Red</i> —altered in shape, granular.
...	45	Melancholia—1st attack.	„ „	<i>White</i> —increased, altered in shape.
...	35	Melancholia—Abstinence [requiring artificial feeding.]	„ „	<i>White</i> — increased, large, granular.
...	45	Mania—Suicidal, homicidal, impulsive.	„ „	<i>Red</i> —irregular in margin, granular, dark, hazy.
...	35	Mania—Pride.	„ „	<i>White</i> —increased, granular, distinct.
...	45	Melancholia.	„ „	<i>Red</i> —altered in shape.

TABLE III.

Cases illustrative of the *presence of decided Physical Disease* in the *Insane*, *without* any abnormal alteration of the blood-corpuscles.

Sex.	Age.	Phase of Insanity.	Character of Physical Disease.
M.	40	General paralysis, recurrent mania—Monomania of riches.	Partial paralysis, phthisis, masturbation, debauchery, anæmia.
...	48	Senile dementia.	Anæmia, emaciation, constipation.
...	50	Dementia, hereditary taint—Delusions.	Phthisis, dyspepsia, anæmia.
...	28	Dementia, partial—Mute.	Struma, anæmia.
...	40	General paralysis—monomania of riches.	Paralysis, partial, spinal disease; plethora capitis.
...	50	Monomania.	Old fracture of skull, tendency to carbuncles.
...	45	Monomania.	Old fracture of skull.
...	30	„ of ambition.	Diabetes.
...	45	Dementia.	Struma.
...	30	Chronic mania.	Ulcers, tendency to erysipelas.
...	40	Mania, erotic.	Syphilis.
...	65	„ paroxysmal.	Anæmia, emaciation, senile debility.
...	40	„	Strumous abscesses.

TABLE III.—(continued.)

Sex.	Age.	Phase of Insanity.	Character of Physical Disease.
F.	35	Melancholia.	Scabies, tendency to erysipelas [traumatic].
...	64	"	Chronic diarrhoea, anæmia, emaciation.
...	35	Mania.	Frequent attacks of dysentery.
...	40	" paroxysmal.	" " bronchitis, menorrhagia and dysentery.
...	40	Monomania of pride—melancholia.	Dyspepsia, cutaneous eruptions.
...	23	Dementia.	Strumous ophthalmia.
...	28	Mania ferox, paroxysmal.	Chronic vomiting, angina, anæmia.
...	20	Mania, religious—Dirty, degraded; hereditary taint; melancholia.	Amenorrhœa, hypochondriasis, anæmia.
...	45	Mania, religious—Delusions, paroxysms of violence.	Strumous abscesses, chronic pleurisy, anæmia.
...	40	Mania—epilepsy.	Frequent attacks of dysentery.
...	40	" chronic.	Menorrhagia.
...	40	" "	Varicose ulcers.

TABLE IV.

Cases illustrative of the *presence, in the Insane, of great mental impairment—accompanied or not by physical complications, without any abnormal alteration of the blood-corpuscles.*

Sex.	Age.	Phase of Insanity.	Physical Condition.
M.	45	General paralysis, 1st stage, mania, chronic, paroxysmal—Mutilator, dirty.	Hepatic disorders, sanguineous tumours of the ear.
...	28	Mania, chronic, paroxysmal—Occasionally abstinent, mutilator.	Masturbation and its effects.
...	35	Mania, chronic—Destructive, noisy.	Good health.
...	40	General paralysis, 2nd stage.	" "
...	45	Chronic mania, dementia—Occasionally abstinent.	" "
...	30	Monomania of pride, dementia.	Pseudo-chorea; healthy.
...	40	" of suspicion, dementia.	" " " "
...	40	Monomania of suspicion—Mute; advanced dementia.	Masturbation and its effects.
...	50	General paralysis, 1st stage. <i>Died.</i>	Cutaneous eruptions, tendency to erythema.
...	35	Mania, epilepsy.	Good health.
...	40	" "	" "
...	50	General paralysis, arrested—Monomania of ambition and riches.	" "
...	25	Amentia.	Diarrhoea.
...	40	Mania passing into general paralysis.	Good health.
...	70	Kleptomania, mania—Vanity.	Apoplexy, epilepsy, partial paralysis.
...	40	Monomania of suspicion—Mute.	Intemperance; healthy.
...	40	Mania ferox.	Formerly a prostitute.
...	40	" paroxysmal, connected with menstruation.	Bronchitis—tendency to dysentery.
...	20	Amentia.	Occasional diarrhoea.

TABLE V.

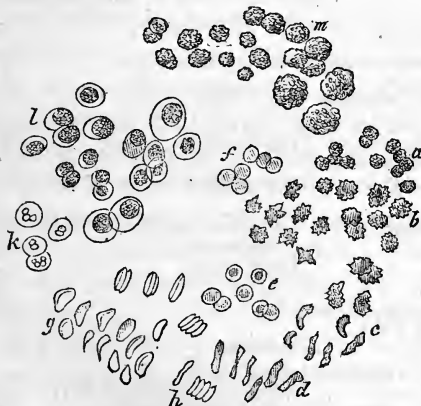
Cases illustrative of alteration of the blood-corpuscles, *in connexion with Physical Disease, in the Sane.*

Sex.	Age.	Physical Condition.	Condition of Blood-corpuscles.
M.	24	Anæmia, sallow, emaciated.	White—increased.
F.	40	Phthisis, menorrhagia, leucorrhœa, chronic hepatitis, anæmia, debility, and emaciation.	„ „
...	30	Dyspepsia, menstrual irregularities, anæmia.	„ „
...	45	Dyspepsia, leucorrhœa, anæmia.	„ „

TABLE VI.

Cases illustrative of alteration of the blood-corpuscles, *without the presence of marked Physical Disease, in the Sane.*

Sex.	Age	Physical Condition.	Alteration of Blood-corpuscles.
M.	35	Robust health.	Red—altered in shape.
...	30	Healthy, but of delicate build.	White—increased, indistinct.
...	25	„ florid complexion.	Red—granular, margin irregular.
...	30	Occasional rheumatism.	White—increased, small, margin smooth.
...	45	Good health.	Red—slightly altered in shape.
...	50	Occasional influenza.	Red—granular, margin irregular.
...	40	Slight dyspepsia, cutaneous eruptions.	White—increased, dark, granular, distinct.
F.	28	Robust health.	White—increased.
...	35	Healthy, but occasionally intemperate.	Red—altered in shape and colour.
			„ „ „



MAGNIFIED 380 DIAMETERS.

acid, exhibiting the development of double or triple, non-granular, but distinct nuclei.

The variations in size, shape, colour, and granularity of both kinds of corpuscle, but particularly of the red discs, are here evident.

Murray's Asylum, Perth, Dec. 1854.

a. Red corpuscles—granular, dark; having a slightly irregular margin.

b. Red corpuscles—non-granular; serrated margin; some of them dark, others light-coloured.

c. Red corpuscles—besides having above characters, assuming an elongated or fusiform shape.

d. Red corpuscles—seen in profile; collapsed or altered in various degrees.

e. Red corpuscles—having a more or less perfect double contour.

f. Red corpuscles—light coloured and pellucid—the supposed *effete* globules of some authors.

g. Red corpuscles—alterations in shape, produced by endosmotic and exosmotic changes.

h. Red corpuscles—adhering in rouleaux.

m. White corpuscles—various sizes; presenting various degrees of granularity and opacity.

l. White corpuscles—reaction of acetic acid; showing the development of a very granular, distinct, single nucleus.

k. White corpuscles—reaction of acetic

LETTSONIAN LECTURES.

No. IV.

ON MEDICO-LEGAL EVIDENCE IN CASES OF INSANITY.

(CONCLUSION.)

Delivered before the Medical Society of London.

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I PURPOSELY decline entering at any length into the consideration of the law of lunacy relating to dispositions of property, and the performance of the marriage contract. In the former case the proof of insanity invalidates all testamentary documents; but the courts are extremely jealous in interfering with the apparent wishes of the testator, unless clear and positive lunacy be established. The character of the testamentary document itself is generally viewed as the most important evidence of the capacity of the attesting party. Persons actually in confinement, and so violent as occasionally to require the application of mechanical restraint, have executed wills, and such wills have been declared valid and operative in the Prerogative Court; the principle of law being, that the *testament itself* exhibited, *prima facie*, no evidence of mental derangement. If the will should be such a will that a sane and rational man would make—the property descending in the right and legitimate channel—the court will not easily be induced to set it aside, even if a considerable amount of eccentricity, oddity, and even insanity, have existed. The proof of eccentricity to an extreme degree, even if accompanied by a testamentary disposition contrary to the usual order of succession, is not sufficient to induce the Ecclesiastical Court to pronounce a will invalid. The following remarkable case of *Morgan v. Boys* is one in point:—

The testator in this instance died, leaving by his will a large fortune to his housekeeper. The will was disputed by his relatives on the ground that it bore intrinsic evidence of his not having been in a sane state of mind. After having bequeathed his property, the deceased directed that his executors should cause some part of his bowels to be converted into fiddle-strings,

that others should be sublimed into smelling salts, and that the remainder of his body should be vitrified into lenses for optical purposes! He further added in a letter, "the world may think this done in a spirit of singularity or a whim;" but he expressed himself as having a moral aversion to funeral pomp, and he wished his body to be converted to purposes useful to mankind. Sir Herbert Jenner Fust, in giving judgment, held that insanity was not proved; the fact merely amounted to eccentricity, and on this ground he pronounced in favour of the will. It was proved that the testator had conducted his affairs with great shrewdness and ability; that he not only did not labour under imbecility of mind, but that he was treated as a person of indisputable capacity by those with whom he had to deal.

The medical man has occasionally to give evidence as to the existence of what, in legal phraseology, is termed a "*lucid interval*." Without entering into a psychological or pathological consideration of this *vexata quæstio*, I will only observe, that all who have had opportunities of studying insanity, must readily admit, that during attacks of mental derangement, the mind does occasionally become exempt from the influence of diseased impressions—at least, from all obvious and appreciable delusions, and is quite competent at these periods of intermission, to the exercise of a right judgment in relation to the disposal of property.

With regard to the legal bearing of this subject upon the question of marriage, it must be obvious that insanity must invalidate the most important contract of life, the very essence of which is consent. The spiritual court has the sole and exclusive cognizance of questioning and deciding directly the legality of marriage, and of enforcing specifically the right and obligations respecting persons depending upon it. But the temporal courts have the sole cognizance of examining and deciding upon all temporal rights of property; and so far as such rights are concerned, they have the inherent privilege of determining incidentally either upon the fact or legality of marriage.*

In cases of disputed wills, on the ground of mental incompetency, the evidence of the medical witness is generally recorded (privately) before a proctor or his representative. The witness has to reply to a series of written interrogatories relating to the

* Starkie on Ev.

testator's state of mind, and his replies are written at length by a person specially deputed to examine him, and take his evidence. The cross-examination is also conducted upon the same principle, and the evidence thus recorded, after being attested upon oath, is adduced in court during the trial. In attempts to invalidate the marriage contract upon the ground of insanity, the inquiry is in some cases of the nature of an ordinary commission of lunacy. Should the insanity be thus established, the subsequent question of divorce must of necessity come before the Ecclesiastical Court. It is not, however, indispensable that in these cases a writ *De Lunatico Inquirendo* should issue.

I now proceed to consider another division of the subject,—viz., that relating to the question of capacity to manage both the person and property, and to submit to you an outline of the character of the evidence adduced during the prosecution of a writ *De Lunatico Inquirendo*. It is at these important inquiries that the legal and medical signification of the terms “soundness” and “unsoundness” of mind come legitimately under consideration. Let me briefly refer to the legal import of these obscure and much-vexed phrases, as defined in one of the recognised text-books upon the “Law of Lunacy.”

“A sound mind,” says Shelford, “is one wholly free from delusion, all the intellectual faculties existing in a certain degree of vigour and harmony, the propensities, affections, and passions being under the subordination of the judgment and the will, the former being the controlling power, with a just perception of the natural connexion or repugnancy of ideas. Weak minds, again, differ from strong in the extent and power of their faculties; but unless they betray symptoms of a total loss of understanding, and of idiocy, or of delusions, they cannot be considered unsound.

“An unsound mind, on the contrary, *is marked by delusions*, mingles ideas of imagination with those of reality, those of reflection with those of sensation, and mistakes the one for the other; and such delusion is often accompanied with an apparent insensibility to, or perversion of, those feelings which are peculiarly characteristic of our nature. Some lunatics, for instance, are callous to a just sense of affection, decency, or honour; they hate those without cause who were formerly most dear to them; others take delight in cruelty; many are more or less affected at not receiving that attention to which their delusions persuade

them they are entitled. Retention of memory, display of talents enjoyment in amusing games, and an appearance of rationality on various subjects, are not inconsistent with unsoundness of mind; hence sometimes arises the difficulty of distinguishing between sanity and insanity. The man of insane mind from disease, having been once *compos mentis*, pertinaciously adheres to some *delusive idea*, in opposition to the plainest evidence of its falsity, and endeavours by the most ingenious arguments, however fallacious they may be, to support his opinions.”*

Previously to the time of Lord Eldon, the term unsoundness of mind, and its equivalent, “unsound memory,” were used indiscriminately in several of the old statutes, not only synonymously with the word lunatic, which in its strict legal signification means a disease of the mind with lucid intervals, but with the phrase idiocy, or permanent insanity. It was reserved for Lord Eldon to give importance and significance to this phrase. Lord Chancellor Hardwicke maintained, that the term implied, not mere weakness of understanding, but a total deprivation of sense Lord Eldon says: “Of late, the question has not been, whether the party be insane, but the court has thought itself authorized to issue a commission *De Lunatico Inquirendo*, provided it is made out, that the party is unable to act with any proper and provident management—liable to be robbed by any one—under imbecility of mind not strictly insanity, but, as to the mischief, calling for as much protection as actual insanity.” Again, his lordship observes, “that unsoundness in some such state of mind undistinguished from idiocy and from lunacy, and yet such as makes him a proper subject for a commission.” The legal acceptance of the term unsoundness is, as Mr. Amos observes, “not very easy to define, for it is neither lunacy, idiocy, imbecility, or incompetency to manage a person’s own affairs; and yet, we have seen, an inquisition finding a person unfit to manage his own affairs, and therefore not of sound mind, has been found bad.” Mr. Amos concludes his remarks by stating that “unsoundness of mind is a legal term, the definition of which has varied, and cannot, even in the present day, be stated with anything like scientific precision.” Mr. Shelford regrets that Lord Eldon should have departed from the original signification of

* Law of Lunacy, by Leonard Shelford, Esq. 1847.

the term unsoundness of mind, and that so much uncertainty and latitude should have been given to the phrase. In a subsequent case, Lord Eldon appears to have laid down a clearer view of his meaning in relation to this important matter. He says: "Whatever may be the degree of weakness or imbecility of the party to manage his affairs, if the finding of the jury is only that he was of an extreme imbecility of mind, that he has an imbecility to manage his own affairs, if they will not proceed to infer from *that*, in thus finding upon oath, that he is of unsound mind, they have not established, by the result of their inquiry, a case in which the chancellor can make a grant, constituting a committee, either of the person or estate. All the cases decide that mere imbecility will not do, unless that imbecility, and that incapacity to manage his affairs, amount to evidence that he is of unsound mind, and he must be found to be so." The *dicta* of Lord Chancellor Eldon have, however, been often disregarded by his eminent judicial successors; and in a statute of William IV., relative to trustees and mortgages, a power is given to the Lord Chancellor to issue a commission "*De Lunatico Inquirendo*" in all cases in which *an inability to manage affairs can be established, apart altogether from the existence of idiocy, lunacy or insanity*. So much for the glorious uncertainty of the law, and the civil security of the subject!* It would appear that the term "unsoundness of mind," although a recognised and adopted phrase, is to be considered as a legal phantom—an *ignis fatuus*—a condition of mind amenable to no philosophical or judicial analysis, incapable of being submitted to any psychological test—like a Will-o'-the-wisp, for ever eluding our grasp, and placing at defiance every standard of comparison—a phase of diseased understanding—a form of lunacy suspended upon, or hovering

* Dr. Ray, when referring to the facility with which commissions of lunacy are granted in this country, remarks: "One finds it difficult to believe on what slight grounds interdiction is there (in Great Britain) every day procured—a measure that, with the ostensible purpose of protecting the interests of the insane party, is too often, in reality, designed to promote the selfish views of relatives and friends. A kind and degree of mental impairment that has never obscured the patient's knowledge of his relative situation, never altered his disposition to be kind and useful to those around him, never weakened his enjoyment of social pleasures, and never affected his capacity to manage his concerns with his usual prudence, has been repeatedly deemed a sufficient reason for depriving him of the use and enjoyment of his own property, and subjecting him to all the disabilities which the law can impose."

between, the confines of positive mental alienation and complete idiocy—an intermediate state of existence—a kind of *tertium quid*, to which modern jurists appear incapable of attaching any precise, definite, or philosophical meaning. Nevertheless, in our courts of law it is *no* fiction—it assumes a palpable form—it is an accepted term—an admitted phrase; and, as medical witnesses, we must be prepared to be asked the question, whether we are of opinion that the case in reference to which we are examined is one of unsoundness of mind, and whether that unsoundness of mind is or is not associated with an incapacity to manage the person and property? It is our duty, however, to recognise no form of mental unsoundness which is not *positively the product of disease*. The judges of the land may affix their own interpretation to the phrase, “unsoundness of mind;” but, as medical psychologists, we must never forget what is due to our position as witnesses, as well as what we owe to the profession, and to the cause of *truth*, and resolutely repudiate any other definition of the term than that justified by a strict psychological analysis.

Unsoundness of mind is either a “diseased” or “healthy” condition of the intellect. If the term implies only *natural mental decay* (unassociated with any well-marked symptoms of disease of the brain, the excitement of insanity, or delusive impressions), a condition of mind occasionally exhibited by persons of healthy intellect, the mental infirmity often contemporaneous with old age; if it refers to an incapacity and inaptitude for the performance of the ordinary business affairs of life, and which may exist apart altogether from connate idiocy or acquired imbecility, insanity, or lunacy; then WE have no authority to take cognizance of the condition—it does not legitimately come within *our medical* jurisdiction. If we accept the phrase “unsoundness of mind,” we can attach, *medically*, no other signification to it than that of a *mind in an unhealthy condition*. Admitting this to be a rational view of the matter, it will be our duty to consider the term as synonymous with insanity, aberration of mind, or lunacy. We cannot admit the existence of a *legal*, apart from a *psychological*, unsoundness.

In making this distinction, I do not wish to prejudge the important question, as to whether there are not states of the intellect clearly accompanied by an incapacity to manage both the

person and property, the result of a premature and natural decay of the mental faculties, independently of any physical alteration in the nervous matter which would justify us in bringing the person so affected within the wise and protective influence of the law? It is quite possible that in some conditions of the mind, "*interdiction*" and "protection" may be desirable for the purpose of guarding the person and property of the individual, who could not, without an act of great injustice, and a monstrous and cruel perversion of the law and of science, be pronounced to be, in the right acceptance of the term, either insane, imbecile, or a lunatic. Should such a class of cases be recognised by statute, and made the subject of legal inquiry and protection, it will be necessary for us to adopt proceedings very dissimilar to an ordinary commission *De Lunatico Inquirendo*; neither should we be justified in applying to those so brought within the jurisdiction and control of the law, the terms usually adopted in writs of this description: such as lunatic, imbecile, idiot, or unsoundness of mind.

There are upon record cases of this kind, which have been made the subject of judicial inquiry. In the case of *Ridgway v. Darwin*, a commission of lunacy was supported against a person who, when sober, was a very sensible man, but being in a constant state of intoxication, he was pronounced incapable of managing his property. This liberality of courts of justice is clearly at variance with the *dicta* of Lord Coke, who pronounced the drunkard to be "*a voluntarius daemon*." By the Roman law, if a man by notorious prodigality was in danger of wasting his estate, he was considered as *non compos*, and committed to the care of *curators* or tutors, by the prætor. By the laws of Solon such prodigals were branded with perpetual infamy. Blackstone questions the propriety of the Roman and Grecian law with regard to drunkards and spendthrifts. He says, it was doubtless an excellent method of benefiting the families, but it hardly seems calculated for the genius of a free nation, who claim and exercise the liberty of using their own property as they please. "*Sic utere tuo ut alienum non lædas*," is the only restriction our laws have given with regard to economical prudence.

The medical witness deputed to ascertain the state of mind of a party, prior to the presentation of a petition to the Court of Chancery for the issuing of a commission *De Lunatico In-*

quirendo, is required to prepare for the consideration of the Lord Chancellor, an affidavit embodying the facts, and his opinion of the case. I would advise the witness not to remain satisfied with one examination of the alleged lunatic, even if the insanity should be very apparent and obvious. The court is better satisfied if the affidavit of the medical *expert* is based upon several interviews. The opinion of the witness assumes a legal form whilst in the hands of the solicitor, and the party giving it, is required to appear at the affidavit office, or before one of the commissioners appointed by the Lord Chancellor, to administer oaths in Chancery, to swear to the accuracy of the document. It is very important that the medical witness should, at the moment of the examination or immediately afterwards take *full notes* and accurate dates of every conversation with the person whose state of mind is likely to be the subject of investigation. If called upon to give *vivâ voce* evidence, he will be permitted to refer to these memoranda, if made at the time of examination. It should also be borne in mind, that the opposing counsel and judge (if the commission be contested) have a right to see and examine, in open court, the notes of the medical witness. Before being called upon to give evidence at a commission of inquiry, he is generally expected, by repeated interviews with, and examinations of, the alleged lunatic, to have made himself fully acquainted with all the peculiar and characteristic features of the case, and to have satisfied his mind as to the existence, not only of mental derangement, but of insanity associated with an inability, from disease, of managing both the person and property. In our examination of the alleged lunatic, we must not take for granted every statement alleged against him; but it is our duty to investigate for ourselves into the truth of the representations made for the purpose of establishing a case of insanity against the person whose capacity and sanity of mind we are deputed to examine. In the generality of instances, the delusions of the party are apparent, and we have little or no difficulty in detecting the mental derangement. In many cases, the intellect is reduced to a sad state of imbecility; and in this type of insanity we have no obstacles to interfere with our arriving at a right conclusion; but doubtful instances occasionally are brought under our notice, giving rise to considerable anxiety, and requiring for their scu-

cessful exposition great caution, much time, and patience. Delusions are sometimes cunningly concealed for a length of time, and notwithstanding we are certain that they exist, no amount of ingenuity will induce the patient to disclose them, particularly if made aware of the object of our visit. I had recently to see a lady whose insanity was manifested in a remarkable degree in her every action; but after paying her several visits, I found it impossible to induce her to exhibit any one delusive impression or insane idea; but no sooner had I left the room, than her conversation and conduct became outrageously insane. Many insane persons are able to talk with apparent rationality, but cannot write without exhibiting their insanity. I have examined recently one very remarkable case of this kind, in a clever, well-read, and intellectual woman, whom I had occasionally to visit. I never could detect the slightest aberration of mind in her conversation, and yet almost invariably upon my leaving, she placed in my hands a letter (which had been written previously to my calling), full of the most absurd extravagancies and fancies; accusing strangers, myself, and the members of her family, of being engaged in a deeply-concocted conspiracy against her property and life. Several of these peculiar and interesting cases are recorded, and the medical man has been advised, with the view of obtaining an insight into the true condition of the mind, to open a correspondence with the alleged lunatic, upon the principle that few persons positively insane can, for any length of time, write, without exhibiting their delusions, whatever amount of self-control they are able to exercise over their thoughts and morbid ideas, during protracted conversations. It is essential for us to ascertain the degree of knowledge possessed of the ordinary and every-day occurrences of life. Upon one occasion I was conversing with a person whose state of mind was the subject of investigation, and finding him rational, and apparently sane upon all points, I questioned him as to who was the reigning sovereign, without knowing he had any delusion upon the point. The person immediately started from his chair, exclaiming, in an excited tone of voice, "I am the sovereign!"

It is a usual practice to test the alleged lunatic's knowledge of the elements of arithmetic, and to ascertain whether he has any idea of the ordinary rate of interest obtainable for money in the funds, or other modes of investment. It would also be

desirable to place before him a simple sum of addition and multiplication. The medical witness may be asked whether he has pursued this mode of examination, particularly in cases of impairment of mind and imbecility occurring early in life. On this account I bring these apparently trivial and unimportant matters before you.

Upon one occasion the mental incapacity of a party was clearly exhibited, by his being easily induced, in the presence of his solicitor, to write the physician who examined him a check for £500, in payment for some imaginary service that had been rendered him. It was palpable that a man, who could thus commit himself with a stranger, would be the willing dupe of any designing person who might be disposed to take advantage of his mental infirmity, and therefore was quite unfit for the management of his person or property. The "arithmetical test," as it is termed, is, in cases of doubtful insanity, of no value *per se*. It is only when conjoined with other evidences of mental impairment and admitted incapacity, that any importance should be attached to it. The position in life of the party, the amount of education he has received, his age, and the opportunities which have been afforded him of acquiring information respecting the ordinary commercial or business affairs of life, should invariably be considered whilst testing the capacity.

In commissions of lunacy, the witness must not only be prepared to give an opinion as to the then state of mind of the party, and competency to take care of his person and manage his affairs, but he must be prepared, occasionally, to pronounce judgment as to a prior questionable condition of brain and mind. The alleged lunatic may, under the exercise of undue influence, have previously alienated his property by will, or been induced to execute other important documents. The witness will be called upon to depose as to the probable state of the brain at the time, and as to the length of the alleged existing attack of insanity. Well-marked symptoms of organic cerebral disease may be present; and it will, in some cases, be an important point to decide, whether such a condition of physical ill-health has not been of some years' duration, impairing the mental vigour, destroying all power of rational conduct and healthy continuity of thought, and thus interfering with a right exercise of the judgment and affections, in the legitimate disposal of property.

The witness, in giving evidence, must abstain from the use of pedantic terms, and technical phraseology. The more simple, unaffected, and unadorned his statement, the greater will be its moral weight. He should carefully and scrupulously avoid all *positiveness* and *dogmatism*, and his testimony ought to be accompanied with judicious qualifications, when relating to cases of difficulty, doubt, and obscurity, respecting which there may, even among eminent scientific men, be great discrepancy of opinion. Dr. W. Hunter, when speaking of the confidence placed in the evidence of men of science, observes, "Some of us are a little disposed to grasp at an authority in a public examination, by giving a quick and decided opinion, which should have been guarded with doubt; a character which no man should be ambitious to acquire, who, in his profession, is presumed every day to be deciding nice questions, upon which the life of a patient may depend."* The evidence of the medical *expert* should impress the court with the conviction that his opinion has not been hastily, crudely, indiscreetly, or rashly formed. It should appear as the result of a full, careful, deliberative, and scientific consideration of the case. Having a lucid conception of the nature of the evidence he is prepared to give, the witness should quietly, but manfully and firmly, maintain his position, and not permit himself to be confused or driven from his point by the cunning artifice of counsel, or thrown off his guard by the disingenuous remarks of the judge. A medical witness, whilst under examination respecting the grounds upon which he had signed a medical certificate of lunacy, after having stated very fairly his reasons for so doing, was subjected to a close examination. He replied to the interrogatories to the best of his ability, rigidly adhering to the simple facts of the case. The answers to the questions did not appear to satisfy the counsel, and he exclaimed, in a pet, "*That* (referring to a particular reply) is not the answer *I wish*." The proper and immediate rejoinder was, "I know not what reply *you wish*, but it is the only one I have the power of giving, and the only one I can give, consistently with my view of the facts of the case." In the celebrated Bainbrigg Will Case, tried at the Stafford Assizes, a physician, whilst under examination, was asked a question respecting monomania.

* On the Uncertainty of the Signs of Murder. By Dr. W. Hunter.

He replied to the interrogatory, coupling with his answer an observation, that he was of opinion that cases of pure monomania did not exist. The judge immediately interposed, and stopped the witness, observing, rather sharply, that he (the physician) was well acquainted with the legal and generally received definition of monomania, and he must adhere to that, for the court could not listen to any metaphysical or psychological discussion about the term. "Monomania," said the judge, "implies a delusion upon one point, the mind being apparently sound and sane upon all others." It would be well for the witness to avoid such altercations, and never permit himself to be involved in a metaphysical disputation. No good can result to our own character, or to the party in favour of whom we appear, by thus entangling ourselves in a philological dispute with the judge, or by attempting any precise medical or psychological definition of terms. Whilst strongly recommending the witness to maintain a firm and manly bearing, I would at the same time caution him against the attempts, if such should be made, to involve him in personal altercations with counsel. It will often be his duty, when under examination, to exercise great self-command, amidst extreme irritation. He should never lose his temper, or indulge in witticisms or retorts upon counsel, even if a happy occasion should present itself for a display of such repartees or pleasantries. An apothecary, who had previously acted as clerk to a barrister, was, whilst under examination in one of the courts in Westminster Hall, asked to inform the court, how long he had changed his position in life? The witness replied, "I began the study of medicine at a much earlier period of life than the late Lord Erskine did that of law, and he attained to far greater eminence in his profession than ever you will!" The judge did not forget this piece of impertinence; for, when alluding to the evidence of the apothecary, he observed, "that whatever knowledge that witness had obtained in studying his *two* professions, it must be clear to every one, that he had not acquired a knowledge of *manners*." These injudicious attempts to "*trim* the lawyer," to "*set him down*," and to "*fight him with his own weapons*," almost always recoil upon the witness. A carpenter was under examination in reference to a serious affray of which he had been cognisant. He was asked, how far he was from the spot at the time of the occurrence? The witness stated the

distance with minute exactness, even to the fractional part of an inch. Being then asked, what induced him to qualify himself to give so singularly minute and precise an answer, he replied, "that, thinking some fool might ask him the question, he had taken the precaution of accurately measuring the ground." This was viewed at the time as a happy *hit*; but it would seriously damage the weight of scientific evidence, and interfere with the legitimate course of justice, if witnesses were allowed, even under admitted provocation, to thus unseemly conduct themselves whilst assisting in the solemn administration of the law.*

Should counsel be disposed, not for the purpose of eliciting the truth, but with the evident object of puzzling and confusing the witness, unconsciously impaling him upon the horns of a metaphysical dilemma, designedly subject him to an unfair examination upon abstract points, thus purposely placing him in a ridiculous position, and damaging his testimony, I would advise the witness respectfully to refuse to reply to the questions, intimating to the court that he was of opinion that they had no direct reference to the point at issue, and could not, in his opinion, throw any light upon the nature of the case under consideration. I will, with the view of conveying an idea of the kind of metaphysical disputation to which a medical witness has occasionally to submit, cite a portion of the examination of a psychological *expert* in a case of disputed insanity.

Q. What would you call insanity? A. Some derangement of the intellectual faculties, or of the passions, either general or partial.—Q. What do you call a derangement? A. An alteration from a natural or healthy state.—Q. What do you call the intellectual faculties? A. The faculties by which we reason, compare, and judge.—Q. What do you call the affections and

* Dr. Bankhead, the private physician to the late Lord Castlereagh, when giving evidence in a case of great importance, was subjected by the counsel, then Mr. Brougham, to a severe cross-examination. The Doctor, in reply to a question, gave an answer which was not deemed at all satisfactory. Mr. Brougham, looking steadfastly at the witness, held up his finger, and pointing it significantly at him, repeated in a measured tone of voice the interrogatory. Dr. Bankhead appeared much irritated at Mr. Brougham's mode of elevating his finger, and manner of repeating the question, and he immediately clenched his fist and shook it at the counsel. Mr. Brougham requested that the witness should inform the court why he assumed so menacing an attitude. He replied, that "it was his practice, whenever a gentleman pointed his finger at him, to shake his fist in return."

passions? A. They are called the motive powers or faculties.—Q. What are the intellectual faculties? A. Comparison, judgment, reflection.—Q. What is comparison? A. By comparison we compare two or more things with each other.—Q. What is judgment? A. Judgment enables us to choose between two or more things after comparison has done its work.—Q. What is reflection? A. The comparison and judgment bestowed upon a subject.—Q. Where do you find the faculty of judgment described? A. I have not given it from any author whom I can name.—Q. Is there any such faculty as the will? A. I don't know that the will could hardly be called a faculty.—Q. What is it? A. The will is a power—a determination of the mind to do something. I wish to avoid going into a metaphysical discussion.—Q. What kind of a power is the will—physical or mental? A. It belongs to the mental powers.—Q. What is the difference between the mental powers and the intellectual faculties? A. I don't make any difference.—Q. Then do you call the will an intellectual faculty? A. It does belong to the faculties of the mind. I do not think it is very properly called a faculty: a good many things go to make up the will.—Q. Where does it operate from? A. I should be glad to avoid any metaphysical discussion about the will. I am not now prepared to go into it. The will is an operation of the mind. If the passions and affections are in action, they determine the individual to do something, and that is called the will.—Q. Is the will passive, then? A. I cannot say that it is passive; I should call it active. The intellect directs the determination to do something, and that determination is the will.—Q. But what part do the passions perform? A. The will is an operation of the mind; the passions and affections determine the act. The will is the result.—Q. What has judgment to do with the will? A. It directs the will. It takes both judgment and the will to choose.—Q. What is reason? A. Reason is an exercise of the intellectual faculties.—Q. Is reason a faculty of the mind? A. I should not call it a faculty; it embraces several faculties—memory, comparison, judgment, and some others, all form the reason.—Q. Have you any experience in the treatment of the insane? A. I have not. I have seen many in the almshouses at Philadelphia.—Q. Have you seen persons that you would not know to be insane

from observation? A. Yes; and I have seen those that I should not know to be insane without being told.*

Many witnesses seriously commit themselves by an undue *loquacity*. This fault—and it is a prevalent and a very serious one—cannot be too rigidly guarded against. Keep to the text; answer the questions tersely, and epigrammatically; and if you should be called upon for a further explanation, let it be brief, and to the point. “I have heard,” says Dr. Gordon Smith, “a very eminent lawyer, after putting a peremptory interrogation to a witness, add, with much energy, ‘Now, sir, that is my question, and I will have an answer *yea* or *nay*!’ It is not very likely that such an overbearing manner will often be observed towards us; but something allied to it might be shown by an advocate, who, having framed a question especially to suit a particular purpose, might not be inclined to trust the discretion of the witness, or disposed to risk any other answer than that he has baited his question for. Our business must be to inform the *court* and the *jury* of the *truth* of the matter, and to disregard the *tenour* of the question, when it is apparent that it is not intended to elicit the truth, still more so if its obvious bent is to disguise it.”

The witness should carefully divest himself of all appearance of partisanship. A quiet, calm, respectful demeanour—and a cautious and modest expression of opinion, even in cases which admit of no doubt—always convey a favourable impression to the court, and give additional weight and influence, to medico-legal evidence. He should remember that in all probability the course of examination is carefully prepared, it being the object of the advocate to obtain from him a reply to a *consecutive series of questions*, thus gradually unfolding and eliciting the truth. Should he, in his eagerness and anxiety to make a favourable impression upon the court, anticipate the interrogatories, he might seriously interfere with the conduct of the case, and injure the cause he is most anxious to uphold.

It occasionally occurs that a medical witness may be fully competent to give sound and satisfactory evidence in relation to the presence of insanity, without having the power of clearly

* The trial of W. Freeman, for the murder of John G. Van Nest, Auburn. 1848.

stating the grounds for his opinion. A medical gentleman, upon being asked, whether he considered a certain person of unsound mind, replied that such was his belief. He was then requested to state his reasons. He said he had formed his conclusion from the "general manner," and "deportment of the patient." The witness was then asked, to describe the "manner," and "deportment," to which he referred. He replied that the patient was "odd in his manner, and had an insane and peculiar appearance about his eye and countenance;" but upon being closely pressed by counsel to describe these symptoms more minutely to the jury, the witness was at once nonplussed, became embarrassed, and broke down. He had a lucid and a *right* opinion of the *matter of fact*, but had no power of describing the symptoms from which he had formed his conclusions. Many men are fully able to give testimony as to *results*, but are totally incompetent to explain the process of reasoning, or succession of thought, by which they have been led to the deduction. A man of practical good sense, who, upon being appointed governor of a colony, had to preside in its court of justice without previous judicial practice or legal education, received the following advice from Lord Mansfield: "Give your decisions boldly, for they will probably be right; *but never venture on assigning reasons, for they will almost invariably be wrong.*" Lord Mansfield knew, says Mr. Mill, who relates the story, that if any reasons were assigned, they would necessarily, be an after-thought, the judge being *in fact* guided by impressions from past experience, without the circuitous process of framing general principles from them; and that if he attempted to frame any such, he would assuredly fail.* It would not be difficult to account, psychologically, for a defect of this kind. Are we not daily in the habit of meeting men who have, in relation to matters of art, &c., an *intuitive* perception of the true and beautiful, but who have no power of describing or analysing their sensations and perceptions?

A favourite manœuvre of counsel is to ingeniously construct a number of hypothetical cases, apparently illustrative of the point at issue, and to place them *seriatim* before the witness, with the view of obtaining his opinion of each individual symptom of the alleged mental condition. The replies to such interrogatories, if

* System of Logic, by J. Stuart Mill, vol. i. p. 254.

unguardedly expressed, are often subsequently referred to, for the purpose of damaging his evidence. We should protect ourselves from these legal onslaughts, by carefully considering, before we commit ourselves to an answer, the precise bearing of every interrogatory; it must be rapidly viewed in all its relations, and if we are not thoroughly satisfied as to its character, it is our duty to request the counsel to repeat the question. If we do not clearly perceive its tendency, we must protect ourselves, by carefully qualifying our answer. In a case where the validity of a will was contested, on the ground of the insanity of one of the subscribing witnesses, it appeared in evidence that he had at one time entertained some absurd delusions, and had attempted suicide; but that for a few months prior to the execution of the will he had repudiated the delusions, quietly pursued his studies, had written a book, and in fact was apparently well, with the exception of his being unusually shy, with a desire for solitude. To one of the witnesses, who had spoken in favour of the sanity of the party, the following question was put:—"Supposing he had committed murder about the time he had witnessed the will, would you have considered him as morally responsible for the act?" This question is said to have been artfully founded upon the imputed disposition of the witness to admit too readily the plea of insanity in criminal cases. The court would not allow the question to be answered, but the reply would not have promoted the object of the counsel.*

In giving evidence, it is necessary to remember that the counsel is not permitted to ask the witness to form an opinion of the condition of mind from the testimony of others. As far back as 1760, Lord Hardwicke, then sitting as Lord High Steward at the trial of Earl Ferrers, decided that such evidence was not legally admissible. A witness, he declared, could not be asked whether the facts sworn to by other witnesses preceding him amounted to insanity; he may be asked if such and such symptoms were, in his opinion, indications of insanity, but the witness cannot be removed from the witness into the jury-box. Evidence of this character is admitted in American courts of law. In the case of *Hawthorn v. King*,† the question of the sanity of a tes-

* American Journal of Insanity.

† Massachusetts Reports, vol. viii. p. 371.

tator was tried, and the counsel for the appellant moved that the attending physicians should be allowed to state whether, in *their opinion*, the deceased, at the time of executing his will, was of sound and disposing intellect. This was objected to, on the ground that the *sanity of the party must be determined by his conversations and actions*. These were said to be the only standard. It was alleged that if such a question were put to the physicians, it would be placing them in the position of the jury. The court, however, took a more liberal view of the matter; and considering very properly that the *truth* was the great and ostensible object in view, overruled the legal objection, and allowed the question to be asked, stating that the medical witnesses would be permitted to give their reasons for any opinion they might entertain.

All attempts at a *definition* of insanity should be avoided.

——— "For to define true madness,
What is't? but to be nothing else but mad!" *

The legal profession is too disposed to regard all judicial investigations involving the question of mental capacity, as they do proceedings at *nisi prius*; and under, I have no doubt, a conscientious appreciation of their functions as advocates, often strive their utmost to destroy, if possible, the opposing medical testimony. Knowing the obscurity of the subject, and the difficulties with which the medical witness has to contend, in giving an accurate definition of insanity, the counsel most unfairly endeavours to pin him down to one; and then, by demonstrating its fallacy, overthrow the whole moral effect of his testimony. If asked to define insanity, it will be more judicious at once to candidly acknowledge our utter incapacity to comply with the request, than, by a vain and ostentatious display of metaphysical lore, to peril the life and interest of a fellow-creature.

There are two principal modes of establishing the existence of insanity during investigations under a writ *De Lunatico Inquirendo*; first, by proving the existence of a *specific* delusion; and, secondly, by showing that the party was guilty of a series of acts of extravagance, in opinion and conduct, originating in unsoundness of mind. The first is the most satisfactory and conclusive kind of evidence; and, when clearly

* Shakespeare.

established, carries conviction to the judgment of the court. When the proof depends upon the existence of a series of extravagancies, the witness must protect himself against a common mode of legal procedure. A number of acts of eccentricity and oddity, both in ideas and conduct, are detailed by him, from which he very rightly, and justly, infers the existence of unsoundness of mind. Viewed collectively, these afford irrefragable evidence of a certain questionable mental condition; but in the cross-examination, counsel, by a well-known mode of legal analysis, skilfully separates the whole conduct of the supposed lunatic into detached portions or sectional divisions; and putting each extravagance, eccentricity, and oddity (alleged to be symptomatic of insanity) *seriatim*, to the witness, inquires, whilst specifying such *individual characteristic symptoms*, whether each one, considered independently of the others, is, in his estimation, a proof of incapacity, insanity, or unsoundness of mind; and thus, unless conscious of the designs of the advocate, the witness may be reduced, by his replies, to the necessity of renouncing his previously expressed opinions; or of absurdly maintaining them after all the facts upon which they are based are knocked from under him by the cleverness and ingenuity of counsel!

Refusing to involve himself in a metaphysical disputation, by declining to give a definition of insanity, the witness will, in all probability, be asked, what is insanity, and by what process of reasoning he has arrived at the conclusion that the party respecting whom he is giving evidence is incompetent for the government of himself and his affairs, or is of sound, or unsound mind? In reply to such interrogatories, it is sufficient for him to say, generally, that he has formed his judgment of the condition of mind by the *conduct, conversation, and ideas* of the person; by considering the symptoms of the case in the aggregate, specifying, of course, the morbid peculiarities of conduct, and the character of the delusive impressions. By this general mode of recording his opinions, the witness will protect himself from a legal snare often laid to entrap and embarrass him.

But whilst suggesting the avoidance of all definitions of insanity, I consider it necessary to recommend the witness to be prepared to answer satisfactorily any questions that may have reference to the scientific import of the terms ordinarily referred to in these

judicial inquiries, to designate recognised legal forms of insanity—viz. *delusion*, *idiocy*, *dementia*, and *imbecility*, &c. I have often been amazed at the answers received by counsel to questions of this character, and given, too, by witnesses of known experience and established reputation. A medical gentleman of some position, whilst giving his evidence very recently in a disputed commission of lunacy, in answer to the question of counsel, defined *idiocy* to be “*inertness of mind*.” The acute lawyer made the most of this unfortunate definition; and feeling that he had within his grasp a witness who used terms without having any clear idea of their signification, tortured him to his heart’s content, much to the annoyance of the medical gentlemen and the amusement of the court.

It is important that we should remember, that in all contested cases of lunacy, relating to the administration of property, it is a matter of moment for counsel, supporting the commission, if he cannot exact an admission of insanity, to induce the witness to acknowledge the existence of an incapacity (apart from the presence of actual lunacy) to manage both the person and property. If the question is: “Do you consider the party of unsound mind?” and the answer should be either negatively, affirmatively, or of a doubtful character, the witness, in all probability, will be immediately asked, “Do you consider the party capable of taking care of himself, and of managing his property?” Upon one occasion, a question of this character was put to myself. “Yes, *legally* competent.” “*Legally* competent!” echoed Sir F. Thesiger; “pray, sir, leave *us* (the lawyers, of course) to decide that point.” He was most anxious to force from me an admission, that, in the ordinary acceptation of the term, the party was not in a condition to take care of herself, or to manage her property; but drawing what I conceived to be a psychological distinction between *natural* and *healthy incapacity*, and *the incapacity the effect of insanity*, I refused to make the admission he was anxious to obtain, and which, if procured, would, I have no doubt, have been turned adroitly against me. It was upon the same occasion, and during the same inquiry, that I was asked, whether, if *I* thought the party were competent to manage herself and her affairs, the *world* would be of the same opinion? I replied, “that, upon intricate and disputed questions of science, I did not think the opinion of ‘the world’ a safe guide.” Upon which Sir F.

Thesiger rejoined, "*Then, I presume, you look down upon the opinions of the world?*"* If I had been permitted, I might have quoted in justification of my remark, the sentiments of a modern philosopher of no mean repute: "The general voice of mankind; which may often serve as a guide, because it rarely errs widely or permanently in its estimate of those who are prominent in public life, *is of little value when it speaks of things belonging to the region of exact science.*"† The opinion of the majority upon questions within the comprehension and grasp of men of ordinary intelligence and natural sagacity, is entitled to our profound respect. It may be, and often is right. But does not history satisfactorily establish, that what in common parlance is designated as the "generally-received opinion" is occasionally very remote from the truth?

"Interdum vulgus rectum videt, est ubi peccat."—HOR.

There is a *legal* incapacity, and, according to law, it is the consequence of diseased, or unsound mind. There is also ordinary and natural incapacity, which may co-exist with a healthy and a sound understanding. This important and essential distinction, the medical witness should never overlook, when giving his evidence.

Having offered some advice to the witness relative to his general deportment whilst recording his evidence, and endeavoured to convey to him some conception of the legal and psychological import of the term "unsoundness of mind," I would take this opportunity of making some remarks upon the importance of avoiding a vague and indefinite application of this phrase. We should enter the court with a clear, precise, and scientific appreciation of the *medical import* of the term. This is most essential to our credit. An indiscriminate and lax use of the word is *invariably* used to our disadvantage and discomfiture. I have seen the most able medical witnesses break down, in consequence of neglecting to be cautious in this particular.

It was at the commission of lunacy instituted with the view of

* I should regret if any of my readers for one moment imagined that I in the slightest degree complain of the course of examination pursued by this able, honourable, and justly distinguished advocate. The conduct of Sir F. Thesiger during the painful and protracted inquiry into the sanity of Mrs. Cumming, is beyond all praise. In his zeal for the interests of his client, he never deviated from the deportment of the gentleman.

† History of the Inductive Sciences, by Dr. Whewell.

annulling Miss Bagster's marriage with Mr. Newton, on the ground of imbecility, that Dr. Haslam made his celebrated declaration as to his belief in the universality of unsoundness of mind.* Whilst being examined by the present Lord Chief Baron, then Sir F. Pollock, Dr. Haslam was asked the following questions:—Q. Is she (Miss Bagster) of sound mind? A. I never saw any human being who was of sound mind.—Q. That is no answer to my question. A. I presume the Deity is of sound mind, and He alone.—Q. Is that your answer? A. I presume the Deity alone of sound mind.—Q. How many years have you been a mad-doctor? A. About forty.—Q. When did you learn that the Deity was of sound mind? A. From my own reflections during the last fourteen years, and from repeated conversations with the best divines in the country.—Q. Is Miss Bagster of sound mind? A. Competently sound.—Q. Is she capable of managing herself and her affairs? A. I do not know what affairs she has to manage.—Q. How often have you given evidence before commissions of lunacy and before a jury? A. I cannot tell. I don't know.—Q. Have you any notion? A. Notion is very much like knowledge.—Q. Have you any idea? A. An idea is a visible perception and a direct recollection.—Q. Have you any belief? A. I cannot say that I have any belief, for that is a direct recollection.†

To say nothing of the impropriety and bad taste of the witness involving himself in a contest about words, and thus fencing with counsel, I would observe, that had Dr. Haslam recognised the prin-

* Sir W. Follett observed, when commenting upon this declaration, "that Dr. Haslam had only followed in the wake of Lord Ellenborough, who, during the trial of Mr. Perry, of the *Morning Chronicle*, for a libel in ascribing mental imbecility to the late King George III., remarked that it was no libel to ascribe to any man unsoundness of mind, for none, save the Deity, was of perfectly sound mind."

† During a debate in 1843, in the House of Lords, on the subject of "*Insanity and Crime*," Lord Campbell, in course of his speech, said, "I know a very distinguished medical practitioner, Dr. Haslam, who maintained, not that there were many who *were* more or less insane, or that all of us *had been* insane at one period of our lives, but that *we all were actually insane*."

Lord Brougham.—"I have heard him say it."

Lord Campbell.—"I, too, have heard him say it repeatedly, and Dr. Haslam would have been ready to prove it."—*Hansard's Parliamentary Debates* for 1843, vol. lxvii. p. 741.

Need we, after such a declaration, feel any surprise at the attempts made to repudiate medical testimony in cases of insanity?

ciple to which I have given exposition, and, in reply to the interrogatories, refused to allow the existence of any unsoundness of mind that was not the *direct result or offspring of disease*, an unfortunate admission, like that to which I have referred, and with which medical witnesses, in cases of insanity, have so often been twitted, never would have been made. If this physician had qualified his opinion by stating that, according to his observation and judgment, there were few minds in a perfect state of development, well-balanced, and disciplined, without some natural eccentricity, or weakness, or in which some one or two ideas had not obtained a predominance, and exercised an influence incommensurate with their value, he would only have given expression to sentiments in conformity with the general experience of all thinking men; but having been appealed to by the court, as an *expert*, and a man of science, to decide the solemn questions of sanity and moral responsibility, it was imperative upon him to have been more guarded and precise in the use of terms having a recognised, popular, legal, and medical import. Dr. Haslam's absurd dogma may be in harmony with the "melancholy madness of poetry,"* and in unison with the fanciful creations of the novelist, but it is certainly not in accordance with the calm speculations of the philosopher.

" 'All men are mad,' the raging poet cries;
 Each frantic reader, 'not quite all,' replies;
 Lifting his jaundiced eye, 'not all, sir, sure,'
 Cries rich Avaro, 'mad beyond all cure';
 'Not all,' coy Chloe adds, 'by wine made bolder;
 'Not all,' repeats the parrot, from her shoulder;
 The pensioned peer affirms, 'it is not so';
 The mitred politician echoes, 'no!'
 Each for himself and friends, the charge denies,
 And Bedlam joins to curse poetic lies."

"Disorders of the intellect," says Dr. Johnson, "happen much more often than superficial observers will easily believe. Perhaps, if we speak with rigorous exactness, no human mind is in its right state. There is no man whose imagination does not sometimes predominate over his reason, who can regulate his attention wholly by his will, and whose ideas will come and go at his command. No man will be found in whose mind airy notions do not sometimes tyrannize, and force him to hope or fear beyond the limits of sober probability. All power of fancy over reason is

* Junius.

a degree of insanity; but whilst the power is such as we can control and repress, it is not visible to others, nor considered as any deprivation of the mental faculties; it is not pronounced madness, but when it becomes ungovernable, and apparently influences speech and action.”*

In this passage the celebrated moralist uses the terms “insanity” and “madness” in their popular and vulgar signification, irrespectively of any attempt at psychological accuracy, or exactness. But the medical witness is not, in the slightest degree, justified in adopting the dicta of Dr. Johnson, or any other writer, however elevated his status in literature, science, and philosophy, who thus unscientifically, vaguely, and indiscriminately uses these important medico-legal terms. But medical men are not alone censurable for attaching to this phrase a general and an unphilosophical acceptance. Eminent legal writers—distinguished members of the bar—celebrated statesmen—following the example of the great lexicographer, have talked of insanity and unsoundness of mind without any regard to the right acceptance of the words. In the eloquent speech of the Solicitor-General during the trial of the Earl Ferrers for the murder of his steward, the following observations occur:—“Every violation of duty proceeds from insanity. All cruelty, all brutality, all revenge, all injustice, is insanity; there were philosophers in ancient times who held this opinion as a strict maxim of their sect, and I consider the opinion right in philosophy, but dangerous in judicature. It may have a useful and a noble influence in regulating the conduct of men, in inducing them to control their impotent passions—in teaching them that virtue is the perfection of reason, or reason is itself the perfection of human nature—but not to extenuate crimes, nor to excuse those punishments which the law adjudges to be their due.” Here again we perceive the error into which the most distinguished men in the legal as well as in our own profession have fallen, by refusing to recognise the great psychological fact, that *no mind can properly be considered to be “unsound” or “insane” which is not subject to actual disease*, the “insanity” and “unsoundness” being invariably the products—the effects—the consequences, of some deviation from the healthy condition of the brain, its vessels or investments, disordering the mental manifestations.

* Rasselas.

Having previously explained what I conceive to be a right definition of the term delusion,—if a definition of the word be practicable, and within the genius of our language,—and having, I hope, clearly and conclusively established, that the non-existence of a delusion is no proof of the *absence* of insanity, unsoundness of mind, and legal irresponsibility, I would, with submission to those who may be called upon in our courts of justice to give evidence in these important cases, offer a few suggestions respecting the legitimate medical interpretation of this disputed phrase. Much of the conflicting character—much of the discredit which has, alas! attached to medico-legal evidence—much of the odium and obloquy thrown upon the examinations of medical men in disputed cases of insanity—may, undoubtedly, be traced to a want of a right and philosophical appreciation of the terms we employ whilst recording our testimony. The word delusion has been exposed to much abuse. No two witnesses appear to have the same conception of the phrase, and consequently advantage is taken of this discrepancy of opinion, and evidence which ought to be considered as extremely valuable, has, in reality, little weight with the court.*

The word delusion is often improperly used to express an erroneous conception, a wrong deduction, an illogical conclusion, a false inference, a palpable fallacy, an unphilosophical result. It is unnecessary for me to remark, that no mind, however well-organized, whatever may have been its degree of training, or the extent of its knowledge, is free from such healthy and normal aberrations. The philosophical opinions of one era are succeeded by those of the following epoch; one sect of philosophers triumphantly overturning the brilliant theories and speculations of those that preceded it. Fashion, peculiarity of education, caprice, social, moral, and political conditions, all may greatly influence, and often do operate, not only in modifying the pre-

* Much has been said of the want of unanimity of opinion among medical men of admitted science and experience in reference to questions of insanity. Is it possible, or even desirable, to have uniformity of sentiment? "I have heard," says Lord Campbell, in his "Life of the Earl of Eldon," "his lordship cite with great glee a saying of Lord Thurlow, that the decrees of the Scotch judges were least to be respected when they were unanimous, as in that case they, probably without thought, had followed the first of their number who had expressed an opinion, whereas, when they were divided, they might be expected to have paid some attention to the subject."

vailing opinions and ideas of individuals, but of large sections of society, as well as of nations themselves; thus inducing trains of thought, and mental sequences, apparently inconsistent with our modern ideas of healthy regularity or even sanity of mind. The superstitious notions and practices of the Brahmins, and of the inhabitants of many portions of the uncivilized world, may appear to us to indicate insanity and unsoundness of mind. But are we justified in this opinion? The general belief, once entertained, of the possibility of curing, by means of the royal touch, a most loathsome disease; the credence attached to the trial by "ordeal of touch," and to witchcraft, even by men of great intellect and learning, holding the highest judicial positions in the country,—were compatible with healthy and rational understandings. Even in our own time, men, whose sanity of mind cannot for a moment be questioned, arrive, by what *they* conceive to be a cautious and philosophical process of induction, at the most absurd conclusions, paradoxes, and fallacies, in open violation of all the elementary rules of logic, right principles of ratiocination, and obviously at variance with the views generally entertained by truly philosophic, thinking, and reflecting men. But are we justified in designating these false inferences, defective reasoning, illogical conclusions, arrogance, conceit, and folly, as *delusive*, and *therefore* as indicative of insanity? A man, in a healthy state of mind, may believe himself capable, in certain exalted conditions of the nerves of sense, of seeing through the *epigastric* region, or a nine-inch brick-wall! He may also consider it possible under the influence of the phenomena of mesmerism, to transfer his spirit into another state of existence,—and, after placing the party to be operated upon under mesmeric influence, to substitute his own volition for the will of another. If I were asked in a court of justice whether I considered chimeras and monstrosities like these to be delusions, I should unhesitatingly reply, *that they were not so, in the right acceptation of the term.* In common parlance they are vulgarly so denominated, but speaking, as we ought always to speak when in the witness-box, with a proper appreciation of the science of psychology, and the philosophic and philological import of terms, I would suggest, that *no notion of the mind, however ridiculous, illogical, fallacious, and absurd, should be admitted to be a delusion, or evidence of unsound mind, unless it be obviously*

and unmistakably the product of a diseased intellect. It is the object of counsel to confound the medical witness; to obtain from him an admission that certain extravagant opinions and anomalous articles of belief are delusions and symptoms of insanity; and selecting, perhaps, the most unphilosophical results at which men have arrived, the witness is requested to say, whether, in his estimation, they are not morbid exaggerations of the fancy, delusions, and evidences of mental derangement? A physician was asked, during a judicial inquiry as to the sanity of a party, whether he believed in the so-called phenomena of mesmerism? He replied in the negative. He was then interrogated whether he did not consider a man to be under a delusion who could bring his mind to believe that, whilst in a mesmeric trance, he could see through a nine-inch brick-wall? The physician immediately answered, that such would be his impression. Having obtained this unfortunate admission, the counsel proceeded to prosecute his examination, and the following questions were then put:—Q. Are you not aware of the existence of a section of educated and scientific men who firmly believe in the truth of mesmeric phenomena? A. Yes.—Q. Do they not consider it possible to see without the aid of ordinary vision? A. Yes.—Q. Are there not a few medical men of repute who have given in their adherence to this opinion? A. Yes.—Q. Do you know Dr. —? (mentioning the name of a physician of great repute). A. Yes.—Q. Are you not aware that *he* has publicly professed his belief in the existence of what you term a delusion? A. Yes.—Q. Then it is your opinion that Dr. — is of unsound mind? The witness at once perceived the dilemma in which he was placed, by not recognising the distinction between a false conclusion, an illogical and unphilosophical deduction, and those conceptions or delusions of the *diseased mind*, the products of insanity, and was unable to escape from the grasp of the acute lawyer, without materially damaging his evidence. The counsel, in his address to the jury, was not forgetful of this admission, and with indignant eloquence asked, what credit they could attach to the opinion of a witness who pronounced men of established repute, in consequence of their belief in mesmerism, to be under the influence of a delusion—in fact, to be of unsound mind?

If this gentleman had entered the witness-box with a philoso-

phic appreciation of the import of the word, no ingenuity or special pleading of counsel, however exalted his reputation for legal subtlety, his expertness in the cross-examination of witnesses, and adroitness in obscuring the truth, would have induced him to fall so readily into his power. I again advise the medical witness never to admit any idea to be delusive, unless it be obviously and palpably the offspring, the product, not of a mind unevenly balanced, with a natural disposition to distort facts, believe in bad logic, or in any gross absurdity of the day, but of *an understanding perverted by disease*. Healthy minds, sane understandings, vigorous intellects have been known to imbibe the most extravagantly false notions, and to arrive at the most outrageous results, and to be subject to the most extraordinary idiosyncrasies of thought and feeling. These must be denounced and exposed as absurd, dangerous, and unphilosophical deductions or principles of belief; but let us not pervert the use of language by designating them as *delusions*, and adduce them as proof of insanity! The term "healthy delusion," which has been occasionally used by men of scientific eminence, when discussing these questions, is equivalent to the phrase "*healthy unsoundness of mind*," and "*normal insanity*."*

There are other occasions requiring the evidence of the members of our profession before we are warranted in interfering with the liberty of the subject. By various Acts of Parliament enacted for the purpose of regulating the confinement of persons on the ground of insanity, it is wisely provided that no step of this nature is legal unless under the sanction of two medical certificates. The power so invested in the hands of two legally qualified practitioners has been made the subject of much comment and animadversion. It has been said, that the legislature is not justified in thus placing the freedom of the citizen at the mercy of two professional gentlemen, who may either be incompetent from ignorance to decide the question of insanity, or may be agents in the hands of unprincipled relations or designing friends, who may, from sinister motives, be desirous of depriving him of his free agency, and the control of his

* In the celebrated Commission of Lunacy upon Mr. Davies, Dr. Haslam was much laughed at for talking of the alleged lunatic having a "delusion of manner!" Lord Brougham was extremely happy in his comments upon this unfortunate expression.

property. With the view of meeting this popular objection, various modifications of the law have been suggested. It has been proposed that, previously to the actual confinement of the alleged lunatic he should be taken before a magistrate or a judge of an inferior court, and that the case should be submitted to the consideration of a jury prior to the certificates of the medical men being acted upon! Again, others who feel more strongly upon this question, and who denounce all confinement, except in cases of acute insanity, accompanied by acts of great violence, as monstrous and unjustifiable outrages, propose that, in every case, a commission of lunacy should issue, for the purpose of considering, whether the party represented to be insane be sufficiently so to justify his being placed *in duress*. With deference to those who have originated these suggestions, I am bound to declare them to be totally impracticable. There are many cases of insanity requiring to be placed under temporary surveillance and proper medical and moral treatment which could not be exposed to any of these preliminary ordeals without imminent danger to life, or without seriously interfering with the safety of the patient, and perhaps altogether retarding his recovery. In many incipient forms of insanity, where the symptoms are acute and associated with much physical disturbance, a speedy re-establishment of health may generally be expected if the patient be removed, temporarily, from the morbid associations of home, and immediately brought within the sphere of systematic medical treatment. In cases of this description, a non-medical jury or judge, ignorant of the character of these affections, and unable to detect the nice shades of incipient insanity, or to recognise the immense importance of prompt and energetic treatment in the early stages of this disease, would, in all probability, from a sense of justice, refuse to sanction confinement of any description, unless in cases of glaring, violent, palpable, mental derangement. No judge and jury, however upright in character, and honest in intention, can be considered qualified, unassisted by medical evidence, to adjudicate in these important and delicate cases, unless they have acquired, by patient study and long-continued practical observation, an intimate knowledge of the varied phases and subtle phenomena of mental disease. When referring to the charge of an anonymous slanderer, that some medical men, from their

poverty, might be bought over to sign the fatal document by the bribes of avaricious relatives, it has been justly observed that, "Although abuses have taken place, we do not believe there ever existed any ground for such an imputation as this; and we are quite satisfied that, in the present day, if no other principle restrained a man from granting a certificate improperly, the certainty of detection would deter him. If the case were to be considered by a jury or county judge, as a preliminary step to confinement, there would be no end to litigation and expense. One half of the alleged lunatic's estate would go to settle whether he should be confined, and the other half under a commission to determine whether or no he was a fit subject for interdiction!"

But let me ask, whether the power so invested in us by the statute law is abused, and whether any necessity exists for legislative interference? Judging from my own experience of documents of this character, I can truthfully affirm that I have never seen an instance—a solitary example—in which the practitioner was not fully justified in certifying, not only to the existence of insanity, but to insanity of such a kind and degree as to justify immediate surveillance. To the honour of our much-slandered profession, I would add, that I firmly believe, as a body of men constituting an important section in the community, we are scrupulously, conscientiously, cautious and exact in the exercise of this power, and that the instances of abuse are so rare, that it would be an act of great injustice to throw, by any alteration of the law, any doubt upon the honesty and integrity of our profession. I trust the day may never arrive when legal will be substituted for medical authority in these cases, and a non-professional judge or a jury be empowered to interfere with the legitimate functions of the medical practitioner! Surely we are, by education, habits of thought, knowledge, and experience, peculiarly fitted to solve the intricate and knotty point involved in the elucidation of doubtful cases of insanity. Sad will be the day for our science when the medical, moral, or judicial care of the insane is transferred from the hands of the medical profession to those of the barrister, highly as I respect his honourable vocation.

Having made these preliminary observations relative to an important part of the subject, I now proceed to refer more spe-

cifically to the duties devolving upon the profession when called upon to certify in cases of alleged mental incapacity, prior to the removal of the patient to a place of confinement. The law wisely requires the production of two medical certificates, not only of insanity, but of insanity to such an extent as to justify restraint, either in private lodgings or in public or private asylums. The Act of Parliament makes the preliminary step imperative *under all conditions of moral restraint*, on the ground of insanity, excepting when the person is confined in *his own* house, or is placed under the care of one who receives no payment for his support. No insane person can be legally controlled in a private house or lodgings without an order for his detention is filled up and signed, or without two medical certificates. The Act of Parliament also requires that *every person* receiving and taking charge of an idiot, lunatic, or party of unsound mind, should make an official return of the fact to the Commissioners in Lunacy.

Great caution is necessary before, under such circumstances, certifying to insanity. In the majority of cases in which we are called upon to testify to the existence of lunacy, the derangement of mind is generally so obvious, and is accompanied by such violence, extraordinary delusions, and excitement, that the medical man has little or no hesitation in complying with the provisions of the statute, and of immediately signing the necessary legal document. But cases do occasionally occur in which much prudence, judgment, and great caution are requisite. Statements may be made to the medical practitioner by the relatives of the alleged lunatic, which, if true, clearly indicate the necessity for prompt interference; but it is our duty to avail ourselves of every reasonable opportunity of ascertaining, not only whether certain facts have not been exaggerated, but whether there is any truth in the evidence adduced to us as proof of the presence of mental derangement. In signing a certificate of lunacy, it should never be forgotten that we may, even at a distant period, be called upon to defend the act in a court of law. This renders imperative, great caution and careful inquiry, in every case presented to our notice.

If it should be alleged that the patient has been guilty of acts of violence, ascertain under what circumstances they were committed. Also inquire whether there has been any reason-

able provocation, and if he has acted under the influence of a delusion, natural violence and impetuosity of temper, or has been justified by *actual circumstances, in so committing himself*. If insane, he may be guilty of an outrage quite disproportionate to the exciting cause. Under the impression that a person supposed to be insane, was inclined recklessly to squander his property, a member of the family or friend might feel himself justified in secreting the patient's cheque-book—in placing his private papers in a position of security. A knowledge of these facts may, in a person of irritable temper, and perfectly sound condition of mind, induce great irritation and provocation, and probably lead to acts of violence and resentment; but if, influenced by such a cause, the patient were to procure a pistol or a knife, with the object of revenging himself for such an apparent insult and interference with his private property, we could not consider this, coupled with other symptoms, otherwise than suspicious evidence of insanity, justifying protection. Insanity often exhibits itself in an unhealthy exaggeration of actual circumstances, conditions, or facts. Should the person accuse others of robbing him, ascertain, as far as is consistent with the respect due to those about the patient, whether there is any foundation for the statement. In some cases, it is difficult to arrive at the truth; but it is our bounden duty, our solemn obligation, to fully inquire into every particular likely to throw light upon the case before interfering with the liberty of a fellow-creature by certifying to his insanity. In some instances, the alleged lunatic, fully sensible of the object of the professional man's visit, and knowing what ulterior measures are to be adopted, will set the medical examiner at complete defiance, and resolutely deny all the representations of those about him.

I had to examine a remarkable case of this nature. I was requested to see a gentleman who was said to be suicidally insane. Upon inquiry, I ascertained, from good authority, that under the influence of most distressing hallucinations he had attempted to hang himself. The patient firmly, earnestly, and apparently with great truthfulness, resolutely and repeatedly denied the fact. He declared that it was an invention—a pure creation of the imagination, originating with his family; that he was happy, subject to no depression, had a strong wish to live, and great fear of death. I examined him, in conjunction with

another physician, and neither of us could seize hold of the salient point, or satisfy himself that the man was actually insane. But we asked ourselves, what motives could his family have for thus misrepresenting the facts of the case? We felt quite assured, from the character of the evidence presented, that an attempt at suicide had been made; but the patient, with an ingenuity which would have reflected credit upon a *nisi prius* lawyer, parried, with great skill, all the questions, and gave such prompt and happy replies to our anxious interrogatories, that we were compelled to admit ourselves, for a time, perfectly defeated. By a course of conversation, I drew the gentleman's thoughts into a different channel; and whilst my attention was apparently directed elsewhere, I kept a close watch upon all his movements. I perceived, as I imagined, some kind of instrument projecting from his pocket. He perceived that my eyes were directed to this, and he immediately expressed an earnest wish to leave the apartment. I at once said, "I cannot permit you to do so, until I know what you have concealed in your trowsers' pocket." He at once manifested signs of embarrassment and excitement, and rising rapidly from his seat, endeavoured to rush out of the door. He was immediately prevented from doing so, and his pockets emptied, and a razor discovered. In his pocket-book a letter was found, which he had written the same day, and addressed to the coroner, intimating to him that he was pursued by an evil spirit, and this impression had driven him to commit an act of self-destruction! Fortunately for our own reputation, and for the patient's life, this providential discovery was made.

It may be necessary to see and examine the patient on more than one occasion before the physician is satisfied as to the actual state of his mind. In cases of doubtful character, I would suggest that this course should invariably be adopted, taking the necessary precaution to recommend close vigilance during the interregnum. I suggest this course, in consequence of my being acquainted with the case of a lady, whose removal from home was for a few days temporarily postponed, in compliance with the cautious and judicious advice of the medical man, who admitted that he could not detect, according to his apprehension, sufficient evidence of insanity to justify him in signing the certificate. During the interim, she succeeded in destroying

herself! In a few instances we are justified in partially acting upon the representations of the family and friends of the alleged lunatic. If a delusion be detected, it must be referred to; and if the patient has committed any overt acts of violence, or manifested a suicidal disposition, it is our duty to refer to these facts, guarding ourselves by stating, that we have derived such information from parties immediately about the patient. It is important, in all cases, to specify the character of the existing delusion. The expression of a belief in the fact of delusive ideas, and of the presence of abstract insanity, without a specification of facts, renders a medical certificate invalid. I have often seen certificates worded to this effect: "I have formed my opinions from the fact of the party being insane"—"being under delusions"—"being excited"—"being violent." These generalizations should be carefully avoided: the more concise the account of the patient's condition, the closer will it be in unison with the expressed wish of the Commissioners in Lunacy. The record of one clear and unmistakable delusion is quite sufficient for all legal purposes. But cases do occur where no delusion can be detected, and yet confinement may be absolutely necessary. Under such circumstances, it is the duty of the medical man to enter more into detail as to the facts of the case. Perhaps I may be excused for suggesting, that in every instance of this kind, the parties should keep copies of their certificates.

Having, I think, conclusively established that we have no uniform legal or medical test of insanity to which we can safely appeal in criminal cases, you will ask, have I any psychological *criteria* to suggest for the safe guidance of the profession?—can I propound any principles which will assist the medico-legal witness in arriving at a satisfactory result? In reply to these interrogatories, I allow that we have no infallible standard, no certain principles which would admit of general and indiscriminate application. The only safe rule upon which we can act, is that of comparing the mind of the alleged lunatic, at the period of his suspected insanity, with its prior, natural, and healthy manifestations; *to consider the intellect in relation to itself*, and to no artificial *à priori* test. Dr. Haslam suggests that the mind of the physician should be the standard by which the sanity should be determined; but this is presuming the mind of the physician to be healthy and sound. In the language of Dr.

Combe, "the true and philosophical standard in all cases is the patient's own natural character, and not that of the physician or the philosopher. It is the prolonged departure, without an adequate external cause, from the state of feeling and modes of thinking *usual* to the individual when in health, that constitutes insanity in the true medical acceptation of the term." This portion of my subject is, however, too comprehensive in its character to admit of elucidation in this lecture.

I have endeavoured in the preceding observations to place before you a sketch—a mere outline—of the character of the evidence admissible in our civil, criminal, and ecclesiastical courts, in cases of disputed lunacy, and I have, to the best of my ability, but still I fear very imperfectly, delineated the duties—the anxious functions—specially devolving upon us, when, in the exercise of one of our responsible vocations, we are called upon for our opinion as medico-legal witnesses in cases of alleged insanity. There is, unhappily, a prevailing prejudice—an illiberal feeling—manifested towards those whose province, and, I may add, whose happiness and privilege it is to stand prominently forward, upon these occasions, to aid by their evidence the administration of justice, under circumstances peculiarly solemn and affecting. These sentiments are not restricted to persons ignorant of the great truths of psychology, and of the characteristics of deranged mind, but they are, to some extent, participated in by a few narrow-minded men among ourselves, who, from motives difficult to divine, evince a disposition to disparage the benevolent and Christian efforts of those who, in the discharge of an imperative professional duty, are ever ready to interpose between the insane criminal and the dreadful and terrible punishment of the law. It may be argued, that this feeling, both in and out of the profession, has been the result of a disposition on the part of the medico-legal psychologist to sanction by his evidence an unphilosophical, dangerous, and a lax use of this plea. If such a tendency has been exhibited, may it not have been the effect of the most benevolent motives—the offspring of truly noble aspirations?—have originated in feelings that do honour to human nature?—have arisen from a conviction that it is our duty to temper justice with mercy, and from a strong conviction that, in obedience to one of the great principles of British Jurisprudence, we are bound, upon all occasions, to

give to the unhappy culprit the benefit of any doubt that may arise respecting his sanity and legal responsibility? In considering this question, we should never forget in many criminal cases the alliance to insanity is close—the line of demarcation between the two conditions indistinct, vague, and shadowy—the boundary separating crime from insanity obscure—the one state often, almost imperceptibly, blending with the other, and that the facts associated with the criminal act so analogous to the recognised phenomena of mental disease, that the medical witness, feeling that in his hands is deposited the life of a fellow-creature—that upon his evidence depends the decision, whether the extreme penalty of the law is to be carried into effect—he, under the conflicting and painful emotions which such a position is calculated to call into active exercise, hesitates in consigning a fellow-creature to an ignominious death, if he can, without doing violence to his judgment and conscience, record his opinion in favour of the prisoner's insanity.

We have only to glance the eye over the tabular statement suspended near me, in order to form a correct idea of the relationship between the criminal and the insane mind.* The table to which I now refer was not drawn up designedly to establish this position; but does it not clearly prove—forcibly establish—the painful fact, that there is in existence a large amount of crime closely connected by hereditary predisposition and descent with diseased mind? Does not a recognition of this truth establish to us, as Christian philosophers, the necessity of cultivating more benevolent feelings, a more enlarged and expansive philanthropy, towards those who, if not morbidly impelled to the commission of crime by an originally malformed cerebral organization, inherit from their parents a marked predisposition to irregularity of thought and action, which ought to appeal—powerfully appeal—to us when estimating the degree of moral guilt attached to any deviation from our *à priori* notions of healthy intellect, or strict moral rectitude? I maintain, and facts—an overwhelming mass of facts—clearly, irresistibly, and conclusively demonstrate my position,—that there is a vast amount of crime committed by persons, who, if

* Vide Table, at the end of the lecture, showing, in numerous cases, the close alliance between crime and insanity.

not "legally" or "medically" insane, occupy a kind of *neutral ground between positive derangement and mental sanity*. I do not broach this idea with the view of supporting the absurd, unphilosophical, and dangerous opinion, that *all* crime is more or less referable to aberration of mind; but I do affirm, that in estimating the AMOUNT OF PUNISHMENT to be awarded, it is the solemn duty of the judge, not only to look at the *act itself*, but to consider the *physical* condition of the culprit—his education—moral advantages—prior social position—his early training—the temptations to which he has been exposed—and above all, WHETHER HE HAS NOT SPRUNG FROM INTEMPERATE, INSANE, IDIOTIC, AND CRIMINAL PARENTS.

"The little I have seen of the world," says an able writer, with a capacious heart, overflowing with love for his fellow-creatures—"the little I have seen of the world and know of the history of mankind teaches me to look upon the errors of others in sorrow, not in anger. When I take the history of one poor heart that has sinned and suffered, and represent to myself the struggles and temptations it has passed—the brief pulsations of joy—the feverish inquietude of hope and fear—the tears of regret—the feebleness of purpose—the pressure of want—the desertion of friends—the scorn of the world, that has little charity—the desolation of the soul's sanctuary, and threatening voices from within—health gone—happiness gone—even hope, that stays longest with us, gone,—I have little heart for aught else than thankfulness that it is not so with me, and would fain leave the erring soul of my fellow-man with Him from whose hands it came."*

In venturing, with great submission, to make these observations, after offering my grateful thanks to the President, Council, and Fellows of this learned Society, for the courtesy, kindness, and generous indulgence which have been manifested towards me during my period of office, I would, in conclusion, protect myself from the imputation of giving utterance to—of breathing the faintest semblance of—an expression that would justify a doubt as to the existence in my mind, of a feeling of deep reverence, and profound respect, for those great and illustrious men, whose unrivalled erudition—brilliant attainments—fervid,

* Hyperion, by Longfellow.

glowing, and impassioned eloquence—world-wide reputation—whose universally acknowledged public and private worth, must, as long as the mind retains its appreciation of virtue, its love of liberty, and admiration of genius, be closely identified, and indissolubly associated, with the brightest and most hallowed periods of the constitutional, parliamentary, and legal history of our country. But may I not ask, whether, since the times of Lord Coke, Sir Matthew Hale, Judge Blackstone, Lord Hardwick, Lord Mansfield, and Lord Chancellor Erskine, we have made no progress in the important truths of medical-psychology—have obtained no clearer insight into the phenomena of the human mind—are not more intimately acquainted with its diseases—and do not entertain more benevolent, just, philosophical, and enlightened views of the great subject of crime, and of the principles of civil and constitutional law?

Can we set bounds—prescribe limits—easily appreciable, well-defined limits—to the progress of knowledge? Have we not, within the last half century, made giant and colossal strides in all departments of art, philosophy, and science? Does not the genius of man indignantly repudiate all attempts to fetter its onward advance, and tie it down to the crude, exploded, and obsolete dogmas of past ages? If such be the fact in relation to the mathematical and physical sciences—to chemistry, medicine, physiology, mechanics, political and social economy, why, I ask, should the great subject now under consideration be the only exception to the general law regulating human progression? Whilst referring to the great intellects and master-minds of former epochs, as well as to the illustrious men of a more recent period, may I not exclaim,—

“Great men were living before Agamemnon,
And since, exceeding valorous and brave?”

CRIME AND INSANITY.*

(A Tabular Statement referred to in page 129.)

Initials of Criminal	Verbatim Extracts from Letter of Referee.	Observations on Degree of Intellect, &c., by the Chaplain when first seen.	Schoolmaster's Report on leaving the Prison.	State on leaving the Prison, as noted by Chaplain.
J. C.	Mother touched with symptoms of insanity.	... ..	Improved in reading and writing.	Improved generally.
R. L.	Grandmother insane ...	Read imperfectly.	Read well; write imperfectly; 4 rules of arithmetic.	
J. H.	Sister rather weak in mind.	Only knew the alphabet	Read and write well; Rule of Three.	Very cheerful; improved in general knowledge.
H. N.	He and most of his family evinced symptoms of insanity.	Of the lowest kind.	Read very imperfectly; write a little; learned a little arithmetic.	Sent away incorrigible.
J. C.	Two sisters insane ...	Of the lowest intellect: did not know A, B, C.	Read well; write tolerably; 4 rules.	Somewhat improved in general.
D. M.	His mother subject to nervous fits.	... ..	Read and write well; Rule of Three.	Mentally, not morally, improved.
J. D.	One of his family (his mother, as I have every reason to believe), labouring with insanity.	... ..	Read and write well; 4 rules.	Improved, in religious knowledge; very cheerful.
R.	Of a simple turn of mind. Uncle in an asylum.	... ..	Improved considerably ...	In Scriptural knowledge also.
W. J., alias	Skull fractured three years ago.	... ..	Improved in reading and writing; Rule of Three.	Improved in Scriptural knowledge.
W. C. B.				
W. G.	Sister considered rather silly.	Of lowest intellect: did not know the alphabet.	Read and write imperfectly; 4 rules.	Cheerful.
A. H. L.	Had become <i>dejected</i> and <i>absent</i> after failure in business, and showed symptoms of <i>insanity</i> .	Very low in spirits.	Read and write well; Rule of Three.	Much improved in spirits; found comfort in religion.
J. N.	Considered rather <i>as an idiot</i> .	Very low degree of intellect.	Read and write well; Rule of Three.	Improved in general knowledge.
W. N.	Almost <i>irresponsible</i> ...	Of very weak intellect	Well educated previously ...	Rather improved mentally.
A. A.	Weakness of mind: made sport of by fellow-servants.	Low in spirits and in intellect.	Read and write well; Rule of Three.	Mentally improved.
F. W. K., alias	Uncle died in an asylum: another committed suicide. Father and sisters considered weak.	Low in spirits; over - active mind; disliked his trade.	Very well educated	Morally improved.
A. K.				
J. M. F.	Mother's brother is reported to be imbecile; harmless if let alone.	Of a low degree of intellect.	Read and write well; Rule of Three.	Improved in general; was recommended to be master tailor on board ship.
R. B., alias	Not considered quite correct in his mind.	Peculiar turn of mind.	... ..	Greatly improved, especially in Scriptural knowledge.
E. E. S., a Jew.	Aunt mad for a long time.			
D. M.	Considered a simpleton	Low intellect ...	Read well; write imperfectly; 4 rules.	Improved generally.
J. M., alias	Uncle killed himself in a fit of insanity.	Low in spirits and intellect.	Read well; write tolerably; Rule of Three.	Much improved.
J. T.				
C. J. C.	Eldest brother exhibited symptoms of insanity.	Good intellect	Well educated	Improved generally.
T. N.	Whole family eccentric; and very weak in intellect.	Weak intellect	Read and write well; Rule of Three.	Improved generally.
R. R.	Uncle's intellect affected at times.	Low intellect; only knew the alphabet.	Read well; write imperfectly; 4 rules.	Improved generally.

* From No. 163 of the "Quarterly Review."

Initials of Criminal	Verbatim Extracts from Letter of Referee.	Observations on Degree of Intellect, &c., by the Chaplain when first seen.	Schoolmaster's Report on leaving the Prison.	State on leaving the Prison, as noted by Chaplain.
J. T.	Father died a lunatic ...	Ordinary intellect.	Reads and writes well; Rule of Three.	Very much improved in general.
J. S.	I have thought, and more, I am sure, that at times he was not altogether right in his head.	More than ordinarily reserved and very dull.	Read tolerably; wrote imperfectly; improvement very little.	On the whole rather improved.
H. C., alias L.	The prisoner's conduct, more especially his wandering propensities, are irreconcilable with perfect sanity.	A good intellect; apparently much compunction for sin.	Could read and write well; considerably advanced in the higher rules of arithmetic. Improvement tolerably fair.	Improved very much. Found peace and comfort in the Gospel.
G. R.	He was not quite sound in mind, and sometimes not conscious of what he was about. His own sister destroyed herself.	A very low-spirited man.	Could read and write very well; considerably advanced in the higher rules of arithmetic; intelligent. Made fair improvement.	Improved in spirits. Found comfort in religion also, I think.
W. H.	His mother has evinced symptoms of insanity within the last three years.	Nothing at all peculiar.	Read well; wrote tolerably; higher rules of arithmetic. Improvement tolerable.	Improved very much, especially in the memory. Gave himself to learning hymns, chapters, &c.
H. L.	His father was subject to fits.	Very low spirited	Could read and write well; mensuration. Improvement tolerable.	Very down-hearted; would have sunk here, I think, but for some religious hope.
J. B.	One member of the family has exhibited symptoms of insanity.	Ordinary... ..	Read well; wrote tolerably; knew the common rules of arithmetic. Very much improved.	Improved.
H. B.	I have known the prisoner to have fits when over-fatigued.	Ordinary... ..	Read well; wrote tolerably; common rules of arithmetic. Improvement tolerable.	Very cheerful.
J. K.	He received an injury in his head, from which time he became flighty and unsteady. His father was in some measure imbecile in both body and mind.	A very active mind, but most perverse.	Could read and write well; higher rules of arithmetic. Improvement tolerable.	Cultivated his mind assiduously, but was very perverse to the last.
W. S., alias R.	Has found him a little insane at times; he was kicked by a horse in the head.	Ordinary... ..	Could read well; wrote tolerably; knew the first 4 rules in arithmetic. Improvement little.	Rather improved.
W. F.	I knew him to labour under a severe nervous fever for several months, which I always observed afterwards to cause a lowness of spirits. It was about 8 years since.	Good, but his constitution apparently weakened by intemperance.	Read and write well; advanced in higher rules of arithmetic. Tolerably improved.	Very cheerful; much improved, I think, in every way. Gave great attention to religion.
J. A., alias E. W.	Has not his senses perfect.	Half-witted ...	Could read well. Made scarcely any improvement.	Rather worse.
W. D., alias J. B.	I fully believe him to be at times insane. His maternal grandfather died insane.	Clever; good, but perverted and abused.	Was well educated on admission. Was excused from school; improved himself tolerably by reading and private study.	Not improved.
W. B.	Very <i>soft</i> in many things	Low intellect ...	Could scarcely read any. Very little improved.	Rather worse.
J. D.	His grandmother is in a lunatic asylum.	Ordinary, but very dull.	Read well; wrote tolerably; first 4 rules of arithmetic. Improved a little.	Improved rather in spirits.

ON PLEDGES EXACTED FROM THE INSANE.*

IN several of his reports, Dr. Samuel B. Woodward, whilst superintendent of the Massachusetts State Lunatic Hospital, has spoken somewhat at large in relation to that particular of moral management, which he has entitled "Pledges." The older writers have also alluded to the subject: Cox does so directly; and in many cases reported by Pinel, Esquirol, and others, the principle is involved. We find various writers, too, alluding to the fact, that the insane will rarely break their word, as for example, Mr. Hill, in his work "On Lunatic Asylums." Dr. Woodward has even extended this principle of treatment to the management of the suicidal. Dr. Bell, of the McLean Asylum, however, is opposed to going so far, observing that, "Pledges, not to abuse privileges, to go out and return punctually, and the like, may be extended to a great degree. But where the pledge would cover so all-important and irreproachable a hazard as that of life, we have never trusted it; the suicide's last act often is accomplished with false representations; his whole intent is not unfrequently accompanied with great sagacity, in throwing the inexperienced and unskilled off their guard. I should not, with my experience, pay the slightest regard to any promise which they might make respecting this act." Dr. W. S. F. Browne also remarks, in his work on "Insanity and Asylums for the Insane," that Esquirol "trusted a military man, who was determined on suicide, with the means of destruction, on his pledging his honour that he would make no attempt to use them." He then goes on to say, "He passed the ordeal in safety, but not without a struggle. This *was venturing far*, perhaps, too far." Moreover, in a letter addressed to the trustees of the New York State Lunatic Asylum, of which, by a gentleman of Baltimore, describing St. Vincent's Hospital, an institution under the management of the Sisters of Charity, we find the following remarks:—"In the pledges so much spoken of in the Worcester Report, the sister places little confidence; she states, that a lunatic derides the idea of a binding promise; especially if it be of the violent type. She thinks these unhappy sufferers are generally conscious of their lamentable condition; and will ask you, when reminded of a broken pledge, 'if you were fool enough to believe a crazy person?'" So far as respects suicidal cases, I agree to the extent mentioned by Dr. Bell, of not trusting them on a pledge alone; I may also remark that, however much I might be inclined to favour the abolition of restraint, yet as to this class I would oppose the theory, at least, of its complete disuse. But still, I think that both of these principles might advantageously modify the treatment pursued in regard to the suicidal; for example, at least in the day-time, though not so apparently, being really watched, we might, with benefit release them from restraint, whilst they were placed carefully and pointedly on the pledge not to make any attempt at self-destruction.

Throwing out of consideration suicidal patients, and also the extremely violent, comprehending in asylums where there are no adjunctive poor-houses or other analogous receptacles, but a moderate class, there are left amongst male patients a very large proportionate number, whose liberties I am satisfied might be greatly increased. The experience of the Eastern Lunatic Asylum of Virginia, with which I am familiar, abundantly testifies to such a conclusion. But on investigation, facts of a striking nature in this relation are to be derived from the records of various other institutions.

The idea presents itself, in the first place, in the history of a large number of patients, who, unfortunately for themselves, it is true, are retained at home

* Read at a meeting of the American Association of Medical Officers of Hospitals for the Insane, by Dr. J. M. Galt, physician to the Eastern Lunatic Asylum, Virginia.

a considerable period before sending them to an asylum, or who reside permanently with their friends. Now, although there may be in the annals of every asylum numerous cases where, previously to his reception in the ultimate refuge from the world's wretchedness, the poor patient was chained down in loathsome dens for years and years; and although, perhaps, circumstances of this, as much as those of any other character, have led to the establishment of hospitals for the insane—circumstances, too, which have induced the public to continue for them a generous support; yet still there is a considerable body of sufferers brought to our institutions whose previous history exhibits them to have gone about for years, unrestrained, in the neighbourhood of their homes.* Hence the deduction is plain, could not the same liberty be allowed them at an asylum, particularly with the systematic action pursued there, not only as to those but as to all other patients?

But, again, take the example of the village of Gheel. Here we find a theatre on which the experiment proposed has been tried for centuries. Here we have patients traversing the streets, partaking in the social amusements of the inhabitants, going about wholly unregarded, and indeed upon precisely the same footing as ordinary citizens; and that, too, not in small numbers, but with few exceptions all have these privileges. This is, indeed, advancing the system far beyond the point which we advocate, and properly considered, it must, in fact, completely close the discussion. Now, opposing arguments, however, may be alleged in this connexion. First, it may be said that the peasants treat their patients kindly at Gheel, that the children of the commune do not annoy them, and that the whole neighbourhood adapts itself to this state of things. Granted. But any difficulty of this kind might be met by invoking the patient's self-control and self-respect, and by invariably casting the blame of any difficulty whatsoever, not on the public, but on him. I speak from experience when I say, that this plan will prevent any disturbance between the insane and the population external to an asylum. Secondly, it may be urged, that there exists some intention in Belgium to change the system at Gheel to the ordinary one usual in hospitals. But this does not materially influence the question in debate. From the accounts of travellers, in the plan adopted at Gheel there are doubtless many deficiencies; for example, the want of some central power, having entire authority over the whole arrangement. Nor would I be in favour of this exact general outline; I merely bring forward the treatment here pursued, as illustrating the *truth*, fixed and immutable, in my opinion, at least, as illustrating it most conclusively, that the patients in our asylums have not a degree of liberty allowed them which they could enjoy without the least disadvantage either to themselves or the public. And if this be so, there are none who can possibly wish to deprive them of any liberty which would lead to no injurious consequences, no matter whether they approve or disapprove of the details of the plan in operation in Belgium.

Another circumstance, leading to the conclusion to which we have arrived, is found in a work published by M. Scipion Pinel in 1844, entitled, "*Traité de Pathologie Cerebrale*." He therein mentions an extraordinary experiment that was tried at the Salpêtrière, which, it is almost needless to remark, contains a large number of patients labouring under mental alienation of long standing; seventy-two of these old cases, looked upon as incurable for years, were sent back again into the world, and only three ever returned. He supposes that there are many chronic cases in establishments for the insane, who, from indolence, from the fear of giving up a life of tranquil ease for one of labour, shrink from recovery; who, from finding themselves amongst

* Probably, indeed, many persons retain recollection of having, in their boyish thoughtlessness, worried and played tricks on these helpless creatures.

the insane, continue to consider themselves as such; and thus remain as inmates merely from these circumstances, and being, as it were, not really deranged. With his explanation, however, or the point—how far they are of unsound mind—we have nothing to do. We would simply mention the success of this experiment with the chronic insane, patients in whom, at any rate, aught like excitement or combativeness has long ago disappeared; and from the result at the Salpêtrière, we would immediately deduce the inference, that to many of the inmates of our asylums might be very suitably granted the minor liberty of going about at will in the neighbourhood of the institution in which they resided.

Another argument which may be urged, is the fact that, in various asylums, we find mention of such liberty as we propose being entrusted to a few of the inmates; for the same liberty might be easily extended to a greater number. Here, as elsewhere, we should never forget the principle contained in any measure; the moment we detect a principle to be involved, and admit its existence, we then establish a rule, that applies not only to a few, but to many. To give an example, Dr. Webster, in his valuable "Notes on Provincial Asylums for the Insane in France,"* remarks, concerning the asylum at Armentière:—"Although no farm is attached to this institution, the gardens adjoining afford means for employing some of the inmates in out-door work. In addition to such occupations, small gangs of patients, under the charge of attendants, are permitted to labour in the fields belonging to the townspeople, from whence they always return to dine in the asylum, but again resume work in the afternoon. For this employment, each patient receives a gratuity of twenty-five centimes per day, which is appropriated to form a fund for after benefits, or occasionally to augment their present comforts. Various inmates are likewise allowed to leave the asylum, under similar regulations, to work for persons in town; some as masons, and others to dig the foundations of new houses now in course of construction. This privilege is appreciated by the poor lunatics, and seems to be beneficial." Again, Dr. Cumming, in his "Notes on Lunatic Asylums," &c., observes, concerning the asylum at Grommstein, in Germany, that many of the able-bodied patients of the institution work with an attendant on the lands of neighbouring farmers. And, speaking of the asylum for the East Riding of Yorkshire, he states that "Mr. Hill, the able superintendent, even sends parties, of both sexes, to market with vegetables raised on the grounds of the asylum; and the city of York is thus partially supplied by lunatic labour." So Dr. Wilson observes, in the "Report of the Bloomingdale Asylum for 1849":—"Most of the patients take frequent and extensive walks under the supervision of an attendant, although many to whom such supervision would be irksome are allowed, when their situation will admit of it, to ramble at their pleasure, upon giving assurance of their return; and but seldom have such promises been broken." Whilst Dr. Ayl writes, in 1841, concerning the patients in the Ohio State Asylum:—"Pledges are often successful, without the necessity of personal restraint. We are seldom disappointed in the word of a patient, seriously given, and 'upon honour.' A number of the peaceable and orderly have the entire freedom of the farm upon these terms, and are sometimes sent down to the city."

In the "Report of the Eastern Lunatic Asylum, of Virginia, for the year 1844," it is observed:—"During a period, longer than twelve months, there has been no enclosure around the southern yard of the institution; and thus nearly all the male patients have, in point of fact, had no barrier whatsoever to going wheresoever they pleased during most of the year just passed." The period here referred to may be considered an intermediate point, in which an uncommon

* Psychological Journal.

degree of liberty, gradually increasing for a year or two before, now reached a maximum, and continued at this maximum for some years succeeding that period. A large number of the inmates, under this absence of restriction, were permitted to ramble into the adjacent country, wheresoever they pleased, unattended, except into town, where it was otherwise forbidden them to go. They would thus take excursions in the woods and fields after nuts and fruit; they would fish in a pond a mile or two off; and bathe in a creek situated at an analogous distance. Going in and out of the wards thus freely, the asylum lost its prison-like appearance. When religious services were held in town, they would also attend them; and, strange to say, when they were of the most exciting character, no harm ensued. During the last Methodist revival that occurred at Williamsburg (in the summer of 1849), three patients attended the meetings very regularly every day, and all of them recovered at that time. The theory of their being permitted to hear preaching, although in town, was that, as an unusual thing, some sane person connected with the asylum would almost always be there. But, in truth, the rule forbidding their entrance into the village was never preserved by them entirely.

This system of extensive liberty was one that was rather the result of time than any sudden action, which was rather the result of gradual experience than any *à priori* theory; and that, moreover, was rather dependent on a varied condition of mind than upon the capacity of each patient enjoying such freedom to give a pledge, and his doing so—although we have headed our article with this title, for the sake of convenience, and remarks into which we would be almost necessarily led, and that, moreover, concerned a subject of importance in the management of the insane. The circumstances leading to one general effect were so various, that it would be difficult to point out the exact operation of each; although, as in other matters, results may be here systematized and reduced to a scientific hypothesis. It will, perhaps, be sufficient for me to point out the fact conceived of a practical bearing; and in this mode of viewing the question, the patients of the asylum may be divided into several classes. In the first place, there are a number of the insane who have been in the institution for many years, and who are in a state of dementia. For a very long period, these have been taken out daily to work. This was the case even before the still existing arrangement was adopted, of having two of the four wards into which the male department is divided, with the doors unlocked during the day, the gates of the enclosure around the institution being also open. These patients would then industriously pursue their daily avocations, and would never care about going outside the premises. No pledge was required of them, and they were incapable of attending to it if it had been. A few, with more active minds than the remainder, would occasionally venture on a fishing excursion, or into the surrounding woods. With many the same vegetative life is pursued in this respect, as in others where they are not allowed to pass freely into the yard outside the building and courts. They would thus, therefore, proceed regularly to the wood-yard and the garden, and never think of advancing their footsteps into town or beyond the immediate neighbourhood. Monomaniacal patients, on the other hand, constitute a class where the pledge was necessary. So with those having, as a peculiar propensity, the idea of returning home. Thus, likewise, with the convalescent.

Now, the advantages of this system were very patent. The patient, in the first place, was rendered much happier. His health was also improved by being so much in the open air, and the general health of the establishment was promoted by keeping the atmosphere of the wards pure, through the mass of the patients being far away from them during most of the day. The faculties of many which, through disuse, would have sunk into a complete state of imbecility, were preserved from such decline by contact with the world. So again all the evils from the assimilation of an asylum to a prison were dissi-

pated. Moreover, the public, from having constant intercourse with these inmates, had proper ideas conveyed to them as to the management of the asylum, and false reports were warded off; for an immediate reply to any one of these would be, "Why, we should have heard the patients of our acquaintance speak of it." And even when the patient conveyed the opposite impression, the general plan of unrestrained intercourse with the public neutralized every evil influence of such a nature. On the whole we may state that the circumstances attending this system were decidedly of a character embodying the greatest degree of freedom found under recent management of the insane; and the advantages were similar to those following increased freedom everywhere.

In looking over the experience of the period, comprising some years, in which the patients were so unrestricted, we cannot perceive any inherent evils which would counterbalance the attendant benefit. So far, for example, as elopement is concerned, to which a system of the kind might, *à priori*, seem liable, the Eastern Asylum will compare favourably with other institutions. And the unpleasant occurrences consequent were few, of little importance, and need not be detailed—such, for example, as a patient obtaining ardent spirits. Occasionally there was some dissension with boys who molested the patients, but on no occasion was there any serious result. Our inmates were always perfectly aware that any dispute with boys or others, exterior to the asylum, would tend to a curtailment of their privileges, whether in any particular difficulty they were to blame or the reverse.

The system under discussion was terminated by the interference of the grand jury of James City County. Nothing was alleged in this instance against it, except, perhaps, a trifling depredation on vegetables or something of the kind, at one of the adjacent farms. But the judge in his charge alluded to the circumstance, that there existed danger from the simple fact of patients going at large; and he remarked that the mere sight of the insane might have a pernicious effect on ladies. The whole affair I think could be clearly traced, not to the true merits of the question involved, but to an unfortunate disposition existing between the townspeople and the inhabitants of the contiguous counties, alike as to the citizens of the place and its institutions; together with a considerable admixture of political antagonism, feelings of intense excitement in connexion with recent alterations in the government of the asylum, and violent dissensions thereupon in the community. Since this edict of the august body by whom it was enacted, the directors have entrusted the exercise of the male patients to three officers, as their exclusive duty.

The result of the experience elsewhere, in the forms which I have pointed out, and the modification of liberty allowed to the patients in the Eastern Lunatic Asylum, I consider such as should lead to a similar extension of privileges in other institutions. In the first place, I would advise in this regard, that the central authority should be particularly careful that the welfare of the lunatics of a whole state be not sacrificed to the prejudices of a petty locality. And to the same intent, I think that before an asylum is established, it ought to be distinctly understood that the patients of the institution would be allowed a large degree of liberty, and that the people of the vicinity would not be permitted to interfere with this question. If evils were to be removed, let the central authority inquire into them, and take the necessary steps. It should be understood that the true view of this question was such, as I may be allowed to express myself, in the phraseology of a patient in the Eastern Lunatic Asylum, to the effect—"That the people of Williamsburg thought the asylum was very near them, but that it was the city of Williamsburg that was very near the asylum." Secondly, one disadvantage under which the Eastern Lunatic Asylum laboured, from its situation, should be, and with care in general might be, avoided, that is, there should be only one entrance to the demesnes of the establishment. Then the officer of the gate-house has entire control of the inmates generally.

Thirdly, I think the plan of confinement in asylums ought always to be modified by placing some of the patients under charge of its officers, to board in the neighbourhood, and particularly insane artisans. The last-mentioned class I would place with persons of their trade in the vicinity, leaving, of course, their supervision to the superintendent of the institution. On the topic just alluded to, I have no time here to enter at large, but I am satisfied that, by an arrangement of the kind, we could frequently act beneficially upon certain inmates, on whom the resources of an asylum had previously been lavished in vain; whilst, by retaining the supervision of a competent medical man, a new set of arrangements would thus be within our power, without the prominent deficiency so peculiarly felt in the cases of patients under private treatment. By such a procedure, we would also create in the vicinity of an institution, for those afflicted with mental alienation, an order of persons familiar with the management of lunacy.

ON THE CAUSES AND MORBID ANATOMY OF MENTAL DISEASES.

BY JOHN WEBSTER, M.D., F.R.S.

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(Continued from p. 637, No. XXVIII.)

No. 41.—M., æt. 65. In hospital five months.—*Head*: Skull-cap remarkably light and thin. On removal, much fluid blood flowed from divided vessels. Slight opacity of arachnoid; pia mater infiltrated with turbid fluid; cerebral vessels generally full, and substance of brain firm.—*Chest*: Firm adhesions of both lungs, and also numerous tubercles.

No. 42.—M., æt. 57. In hospital twenty-nine years and four months.—*Head*: Vessels, both external and internal, unusually empty. Convolutions partially shrunken, showing large intervals filled with perfectly limpid fluid, infiltrated in cellular tissue of pia mater. Between one and two ounces of serum in each lateral ventricle; much fluid about velum, and large quantity in base of skull, after removal of brain.—*Chest*: Some inconsiderable old adhesions of lungs, with spots of inflammation in each organ; also hepatisation. Heart greatly enlarged, of compact, dense structure, and cavities filled with coagula.

No. 43.—M., æt. 38. In hospital ten years, eight months, and two weeks.—*Head*: General infiltration of pia mater, covering hemispheres. Upwards of an ounce of fluid in each lateral ventricle, and much also about velum. *Chest*: Right lung partially adherent; contained tubercles, and numerous excavations. Left lung also adherent, and tuberculated.—*Abdomen*: Peritoneum, in whole extent, showed tubercular degeneration; viscera universally adherent to each other.

No. 44.—F., æt. 49. In hospital five days.—Body fat, subcutaneous adipose tissue being, in some situations, nearly two inches thick.—*Head*: Arachnoid thin and transparent. Moderate effusion of pia mater. Cerebral substance firm. Ventricles contained more than an ounce of clear serum; also small quantity in base of skull after removal of brain.—*Abdomen*: Uterus contained a large fibrous tumour attached to substance, whereby os tincæ was tilted upwards.

No. 45.—F., æt. 51. In hospital two months and three weeks.—*Head*: Dura mater adhered firmly to skull-cap. Arachnoid transparent. Pia mater so full of blood as to impart general dark-blue hue to convex surface of hemispheres. Convolutions shrunken. Cerebral substance soft and easily torn.—*Chest*: Old adhesions of both pleuræ. Numerous tubercles and punctured cicatrices in both lungs. Posterior part of left lung dark coloured, heavy, and friable.—*Abdomen*: Uterus contained ten fibrous tumours, the size of marbles.

No. 46.—M., æt. 31. In hospital eight months and a-half.—*Head*: Vessels generally empty. Arachnoid slightly opaque. Serous infiltration of pia mater covering hemispheres. About an ounce of fluid in each lateral ventricle. Cerebral substance generally softish, especially in fornix and adjacent parts.—*Chest*: Both lungs tuberculated with purulent excavations.—*Abdomen*: Acute general peritonitis, with agglutination of viscera, and copious puriform effusion. Ulcerations of intestines in various portions; whilst mucous, muscular, and serous coats had given way in some places, but a process of repair seemed in others to have made progress.—Body emaciated.

No. 47.—F., æt. 61. In hospital three months and two weeks.—*Head*: External vessels quite empty, internal more full. Infiltration of pia mater. Increased quantity of fluid in lateral ventricles.—*Chest*: Left lung tuberculated with purulent excavations. Also recent pleurisy. Tubercles likewise in right lung.

No. 48.—F., æt. 46. In hospital twelve months.—*Head*: Slight infiltration of pia mater. About an ounce of fluid in each lateral ventricle. Partial opaque thickening of arterial trunks at base of brain.—*Chest*: Old adhesions of lungs; did not collapse, broke down on pressure, and loaded with fluids. Bronchial tubes reddened, and filled with frothy mucus.—*Abdomen*: Liver adhered to diaphragm. Kidneys only one-third natural size, lobulated externally, and capsule adhered firmly to substance. Structure normal.

No. 49.—M., æt. 64. In hospital three months.—*Head*: Very firm adhesions of dura mater to cranium, which was torn on skull-cap being detached. Vessels of bone and membrane filled with blood. General infiltration of pia mater. Between one and two ounces of serum in both lateral ventricles; also much fluid in base of skull, after removal of brain. Vessels of pia mater and cerebral substance extremely turgid, with numerous and large bloody points on cut surfaces.—*Chest*: Between one and two pints of reddish fluid in left pleura. Circumscribed empyema, containing pus at lower part of cavity. Lung inflamed, of livid black colour, apparently in progress of mortification, and exhaling characteristic fœtor. Neighbouring pulmonary substance bright scarlet.

No. 50.—M., æt. 27. In hospital four months.—*Head*: Skull-cap light. Dura mater nearly white. Pia mater full of blood. Cerebral substance moderately firm and vascular. Considerable serous infiltration between convolutions, and at base of skull after removal of brain.—*Chest*: Both lungs tuberculous; left adherent to ribs, and excavated by large cavern. Right lung consolidated nearly throughout, and exhibited numerous vomicae.—*Abdomen*: Numerous ulcers in ileum. Mesenteric glands large, and contained tuberculous matter.—P.S. Patient extremely emaciated.

No. 51.—F., æt. 27. In hospital one month.—*Head*: Skull-cap light and thin, with frontal portion particularly flat. Vessels of dura mater full of blood. Opacity of arachnoid. Pia mater converted by serous infiltration into loose spongy-like tissue. Cerebral substance soft. Ventricles contained about three ounces of serum. Foramen of Monro unusually large. Much fluid at base of skull after removal of brain.—*Chest*: Heart small. Old adhesions of left lung; superior lobe puckered and tuberculous.—*Abdomen*: Cavity distended by reddish brown serum, containing numerous flasks of lymph. Great omentum thickened. Convolution of intestines matted together. Peritoneum pink-coloured. Perforation of ileum near cæcum through which contents had escaped into peritoneal cavity. Mucous surface of intestine covered by continuous layer of lymph for three inches; and numerous elevations of Peyer's glands, as if enlarged. In this portion of canal seven or eight pieces of comb commonly worn in the hair by females were found. They appeared quite black, and like needles, whilst two bits had perforated walls of intestine near greatest aperture. Ovaries large, dark coloured, and contained clots of blood.

No. 52.—F., æt. 61. In hospital three weeks. *Head*: Dura mater adhered firmly to bone, whereby membrane was torn on separation. Arachnoid transparent, but pia mater gorged with blood. A few drams of clear serum in ventricles. Cerebral substance firm.—*Chest*: Left lung most extensively tuberculous, and whole superior lobe excavated into vomicae. Effusion of soft yellow lymph in pleural sac, with adhesions. Right lung similarly diseased.—*Abdomen*: Two circular ulcers on ileum, and mesenteric glands enlarged.

No. 53.—F., æt. 21. In hospital one month.—*Head*: Skull-cap dense and heavy. Arachnoid transparent, but raised from surface of brain by large quantity of clear serous fluid infiltrated into areolar tissue of pia mater. Cerebral substance soft. Ventricles distended by serum, and much serous fluid at base of skull after brain was removed.

No. 54.—F., æt. 60. In hospital three months and one week. *Head*: Effusion into pia mater. Posterior cerebral convolutions shrunken. Arachnoid transparent. Brain firm and white.—*Chest*: Heart large, soft, and flabby. Valves all thickened and opaque; two of aortic semilunars being united into one piece. A congenital malformation. Left pleura universally adherent. Cavity containing nearly two pints of reddish brown serous fluid, with lymph in lower third. Lung compressed. Cretaceous bodies in right lung; largest, size of a pea. Lining membrane of trachea red.—*Abdomen*: Kidneys one third natural size. Cortical substance strongly adherent to fibrous capsule. Surface of organ rough and granular.

No. 55.—M., æt. 45. In hospital fourteen years and ten months.—*Head*: Dura mater deeply tinged yellow colour. Arachnoid transparent, with small quantity of serous effusion, also of yellow hue. About two ounces of serum in lateral ventricles. Both corpora striata much less prominent than natural, and appeared to have undergone absorption.—*Chest*: Numerous old adhesions in both pleurae. Posterior part of right lung deep livid colour, friable, and emitted offensive odour of putrefaction. Valves of heart thickened and opaque.—*Abdomen*: Large effusion of yellow serum. Liver small and knobbed; with masses of medullary cancer, varying in size from filbert to large walnut, scattered throughout. Gall bladder empty. Spleen adhered firmly to abdominal parietes.

No. 56.—F., æt. 26. In hospital five days.—*Head*: Dura mater adhered firmly to bone, leaving shreds attached. Arachnoid dry. Pia mater infiltrated by serum; and raised from adjacent cerebral convolutions, which, in many places, seemed shrunken and atrophied. Cerebral vessels full of blood, with tinged cut surfaces of a reddish hue. About two ounces of clear fluid in ventricles; and also much at base of skull. Right posterior clinoid process of sphenoid bone projected about half an inch beyond its fellow, smooth, crusted with cartilage, and in any other situation might have been taken for an exostosis.

No. 57.—F., æt. 37. In hospital fourteen months and one week.—*Head*: Skull-cap thick and heavy. Vessels of brain and membranes turgid throughout. Infiltration of pia mater, and slightly increased effusion of fluid in lateral ventricles.—*Chest*: Superior lobe of left lung extensively congested on posterior aspect; with partial hepatization. Similar change in upper lobe of right lung, and an excavation, containing dark, offensive fluid.

No. 58.—M., æt. 43. In hospital six months and three weeks.—*Head*: Arachnoid sac dry. Membrane white and opaque. Cerebral substance soft and white. Convolutions flattened. Lateral ventricles distended by clear serous fluid.—*Chest*: Large aneurismal sac of aortic arch, adherent to sternum, rent into pericardium, which was distended by about one and a-half pound of deep-black coagulated blood. Semilunar and mitral valves thickened and hard. Heart soft. Lungs bulged from cavity on removal of sternum, and posterior parts broke readily under pressure.—*Abdomen*: Liver hard, and pressed down.—

wards to umbilicus. Fibrous capsule of kidneys adhered with preternatural firmness, portions of cortical substance being torn in attempting separation.

No. 59.—M., æt. 63. In hospital three months and three weeks.—*Head*: Slight serous infiltration of pia mater. About half a teaspoonful of blood in right middle fossa of basis cranii. Coagulum adhered to dura mater; but no breach observed on cerebral surface, nor any appearance of external injury. An ounce, at least, of limpid fluid in each lateral ventricle, and much remained in base of skull after removal of brain.—*Chest*: Universal firm adhesions of left lung to cavity. Right partially hepatized, with lower portion congested and softened. Heart beyond normal size, so that pericardium in contact with parietes about an inch. Left ventricle very thick and firm.

No. 60.—F., æt. 42. In hospital six months and three weeks.—*Head*: Skull-cap extremely thick, heavy, and dense in structure; cancellous texture entirely disappeared. Vessels of dura mater full of blood. No arachnoid sac over left hemisphere; several flakes of extravasated blood, some of considerable size. Brain small but firm, and vessels moderately full. Slight extravasations of blood upon surface of cerebellum, and at base of skull.—*Chest*: Heart small and contracted. Lungs deep-blackish hue, and lining membrane of trachea congested.—*Abdomen*: Large ovarian cyst in pelvic cavity. Right ovary almost disappeared. Left occupied by five smaller cysts; and all contained lymph fluid.

No. 61.—M., æt. 29. In hospital six months.—*Head*: Opaque white spots in arachnoid. Vessels of pia mater and cerebral substance full of blood. Ventricles contained considerable amount of clear serous fluid. Septum lucidum torn, and in shreds.—*Chest*: Universal firm adhesions on right side of thorax. Lung everywhere tuberculous, also hepatized. Left pleural sac contained about two pints of sero-purulent fluid. Left lung coated with thick lymph, and both organs contained numerous cavities.

No. 62.—F., æt. 63. In hospital two days.—*Head*: Skull-cap dense, heavy, and shallow. Pia mater converted into loose, spongy texture by serous effusion; especially along superior longitudinal fissure. Arachnoid white and firm. Ventricles contained a few drachms of lymph fluid.—*Chest*: Old adhesions of pleuræ, with two scattered cretaceous deposits in pulmonary texture. Both heart and lungs pushed upwards by abdominal viscera so as to diminish considerably thoracic cavity.—*Abdomen*: Large ovarian cyst occupied whole of pelvis. Solid white fibrous tumour, about size of walnut, upon wall and in situation of ovary. Ureters dilated. Kidneys large, dark-coloured, and full of blood.

No. 63.—M., æt. 35. In hospital six weeks.—*Head*: Not a drop of blood flowed on dividing integuments and exposing cranium. Vessels of dura mater not unusually full; but those of pia mater and cerebral substance turgid to minutest ramifications. Arachnoid, over entire cerebral surface, slightly and partially opaque, being of milky colour in intervals of convolutions. Slight infiltration of pia mater. Each lateral ventricle contained about an ounce of pellucid fluid.—*Chest*: Pleuræ in both cavities inflamed throughout, and each contained nearly two pints of sero-purulent fluid, with some flakes of soft fibrin. Lungs consolidated, and exhibited congestive stage of pneumonia. Left lung connected to thorax by old adhesions.

No. 64.—F., æt. 65. In hospital five months.—*Head*: Bones of skull unusually thick and heavy. Arachnoid partially opaque. Pia mater infiltrated. Lateral ventricles distended by large quantity of limpid fluid. Septum lucidum torn and attenuated. Cerebral substance somewhat congested, and bloody points on cut surfaces large and numerous. Much fluid in base of skull after removal of brain.

No. 65.—F., æt. 35. In hospital seven months and three weeks.—*Head*: Not a drop of blood in exterior coverings of cranium. Vessels of brain and

membranes turgid everywhere. Thickening and slight milky opacity of arachnoid over hemispheres. Pia mater considerably infiltrated. Each lateral ventricle contained at least an ounce of perfectly limpid fluid, and much remained in base of skull after removal of brain.—*Chest*: Pulmonary substance of left lung consolidated, dull brownish colour, and several small suppurations.

No. 66.—F., æt. 18. In hospital seven weeks. *Head*: Skull-cap adhered firmly to dura mater. Arachnoid opaque. Considerable effusion of clear fluid into pia mater, occupying intervals between shrunken convolutions. Cerebral substance full of blood, and serum in lateral ventricles.—*Chest*: Trachea filled with light-brown, extremely offensive fluid. Gangrenous odour prevailed on removing sternum. Right lung extensively mortified, and similar changes, but to less extent, in left pulmonary tissue.—*Abdomen*: Stomach enormously distended with light, chocolate-coloured fluid. Mucous membrane of viscus soft, and almost decomposed. Slight intus-susception of ilium.

No. 67.—M., æt. 38. In hospital one year.—*Head*: Internal vessels full. Partial milky opacity of arachnoid on cerebral hemispheres, particularly between the two lobes, where membrane was loose; and left large sub-arachnoid space. Slight infiltration of pia mater. Increased deposition of fluid in ventricles, and very large quantity in base of skull, after removal of brain.—*Chest*: A few old adhesions of lungs to cavity of thorax.

No. 68.—F., æt. 33. In hospital seven months and three weeks.—*Head*: Skull-cap thick and heavy. General infiltration of pia mater. About one and a-half ounce of perfectly limpid fluid in each lateral ventricle; and much fluid also remaining at basis cranii after removal of brain.—*Chest*: Slight old adhesions at upper lobe of left lung to cavity.

No. 69.—M., æt. 32. In hospital six months.—*Head*: Skull-cap shallow, and very firmly adherent to dura mater. Slight opacity of arachnoid. Pia mater infiltrated by serum. Convolution shrunken, and cerebral substance atrophied. Lateral ventricles greatly distended, and contained about four ounces of clear serous fluid.—*Chest*: Right lung congested, friable, solid, and contained no air.

No. 70.—M., æt. 44. In hospital two weeks.—*Head*: Integuments infiltrated by sero-purulent fluid; and skin of upper eyelids partially sloughed. Pericranium stained of red colour, and vessels congested with blood. Dura mater of reddish hue, on both surfaces, from congested bloodvessels. Pia mater infiltrated with turbid serum. Ventricles distended. Under middle lobe, at base of skull, about half an ounce of blood, forming a clot, had escaped from a superficial cerebral vein. Adhesion of cerebral hemispheres along superior longitudinal sinus, so strong as only separable by knife. Encephalic contents full of blood.—*Chest*: Old and firm adhesions of right pleura.—*Abdomen*: Strong adhesion, of old date, between intestines.

No. 71.—M., æt. 38. In hospital one year and ten weeks.—*Head*: General reddish discolouration of pia mater covering hemispheres, from transudation of blood; membrane also considerably infiltrated.—*Chest*: Left lung connected to thorax by recent general adhesions; its surface being covered with thin adventitious layer of fibrin. Posterior portion partly congested and hepatized, with a small collection of pus. Right lung also congested, and partially hepatized.

No. 72.—M., æt. 18. In hospital twelve days. Soft structures on back of hand, fore and upper arm generally disorganized by violent inflammation; with extensive suppuration and sloughing of skin and cellular tissue in two latter situations.—*Head*: Bloody points on cut surfaces of medullary substance numerous. Increased quantity of fluid in ventricles.—*Chest*: Right lung distended, with congestion. Left collapsed.

No. 73.—F., æt. 39. In hospital thirty-two days.—*Head*: Dura mater adhered strongly to skull-cap. Arachnoid partially opaque. Pia mater infiltrated by serous effusion. Cerebral convolutions atrophied, and leaving

considerable spaces between. Ventricles much distended, and contained about three ounces of limpid fluid: cerebrum small.—*Chest*: Right lung universally adherent to parietes.

No. 74.—M., *æt.* 24. In hospital six days.—*Head*: Vessels of brain and membranes turgid. General infiltration of pia mater. About one and a-half ounce of fluid in lateral ventricles, and much remained at base of skull after removal of brain.—*Chest*: Recent acute inflammation of pleuræ covering each lung, with copious effusion of soft yellow fibrin. Pulmonary substance in highest state of vascular congestion, and adventitious deposit in texture, but without any trace of suppuration.

No. 75.—M. *æt.* 39. In hospital six weeks.—*Head*: Cerebrum small in size. Slight and partial opacity of arachnoid. Considerable effusion of serous fluid into pia mater, which occupied spaces between shrunken convolutions, like a sponge. Ventricles contained a considerable amount of serous fluid. Cerebral substance red, from injection of bloodvessels. Patient died of erysipelas.

No. 76.—F., *æt.* 48. In hospital twenty-two years and two months.—*Head*: Arachnoid covering hemispheres thickened and opaque. Pia mater greatly infiltrated; and about an ounce of limpid fluid in each lateral ventricle. Brain soft.—*Chest*: Heart large and flabby: dropsical effusion both in thorax and abdomen. Patient having died of anasarca.

No. 77.—E., *æt.* 46. In hospital three weeks.—*Head*: Slight effusion under arachnoid. Convulsions flattened, and ventricles filled with limpid serum.—*Chest*: Some old adhesions of right pleura. Left lung converted into soft, black, and nearly airless mass, with portion of middle broken down, and containing a reddish-brown fluid.—*Abdomen*: Large fibrous tumour in uterus.

No. 78.—M., *æt.* 44. In hospital twelve years.—*Head*: Skull-cap adhered so firmly to dura mater that it was separated with difficulty. Parietal layer of arachnoid red, from injection of vessels in dura mater with blood. Soft, and continuous layer of fibrin extended from base of skull to fossa of cerebellum. Ventricles distended by clear, limpid serum. Arachnoid partially opaque, with considerable amount of fluid under membrane.—*Chest*: From three to four pints of sero-purulent fluid in right pleural sac, whereby lung was compressed. Left lung contained tuberculous matter, also cavities, and adhered to thoracic parietes.—*Abdomen*: Ilium congested, and small ulcers near junction to cæcum.

No. 79.—M., *æt.* 33. In hospital six weeks.—*Head*: Dura mater adhered so firmly to bone as to be torn into shreds during separation. Arachnoid universally of milky-white colour, and opaque; membrane raised from convulsions by much serous infiltration, converting pia mater into a spongy texture. Cerebral substance red through injection of bloodvessels. Ventricles distended by clear fluid. Choroid plexus empty of blood, white, and colourless.—*Chest*: Both lungs contained cretaceous tubercles; and at apex of left, puckered cicatrix, upon which several small, hard, earthy masses projected.

No. 80.—M., *æt.* 39. In hospital six months and one week.—*Head*: Much dark and rather thick blood escaped on dividing scalp. Arachnoid over whole extent of hemispheres opaque and thickened. Pia mater considerably infiltrated, and adhered closely, as also extensively, to brain; this covering of hemispheres looked like spongy substance. Wherever sections were made, copious effusion of infiltrated fluid supervened. About two ounces of perfectly limpid fluid in each lateral ventricle. Internal vessels of brain turgid.—*Chest*: Some old adhesions of pleuræ. Heart hypertrophied; with sides of right ventricle thick and dense.

No. 81.—F., *æt.* 25. In hospital two months.—*Head*: Cranium thick, heavy, and vascular. Vessels of brain and membranes turgid. Bloody points, on cut cerebral surfaces, large and numerous. Moderate infiltration of pia mater. About an ounce of limpid fluid in each lateral ventricle, and much also remained in base of skull after removal of brain.—*Chest*: Recent adhesions of right

lung; organ impervious to air, solid, inflamed, and contained tubercles. Left lung at its lower part also in congestive stage of pneumonia.

No. 82.—F., æt. 66. In hospital eight months and a-half.—*Head*: Dura mater adhered very firmly to skull-cap, being torn into shreds upon separation of bone. Brain small, soft, and anterior lobe remarkably flat.—*Chest*: Gangrene of left lung, posterior part being of deep livid black colour, soft and friable, and emitting a most offensive odour. Valves of heart opaque and thickened.—*Abdomen*: Congestion of mucous membrane of ilium. Kidneys large.

No. 83.—F., æt. 65. In hospital two weeks.—*Head*: Skull-cap adhered so firmly to dura mater that membrane was torn to shreds upon removal of bone. Arachnoid partially opaque. Pia mater converted into loose spongy mass, occupying wide interspaces between convolutions, which were atrophied and shrunk. Moderate effusion of clear fluid in ventricles, and much at base of skull after removal of brain.—*Chest*: Sac of pericardium distended by several ounces of reddish-brown serum, and inner surfaces covered by thick layer of soft fibrin. Muscular substance soft, and tore readily. Circumscribed cavity in sac of left pleura contained a pint of serous fluid, and lymph, in parts half an inch thick, separated this cavity from lower portion of pleura.—*Abdomen*: Uterus contained one fibrous tumour the size of a walnut.

No. 84.—F., æt. 51. In hospital four months.—*Head*: Skull-cap thick, dense, and heavy, with extremely firm adhesions of dura mater, infiltration of pia mater, and about an ounce of fluid in lateral ventricles.—*Chest*: Firm old adhesion of right lung, with tubercular matter and cretaceous deposit in substance.—*Abdomen*: Close adhesion of diaphragm to convex surface of liver. Numerous elongated adhesions of liver to stomach and arch of colon. Soft but tough fibrous tumour in wall of uterus.

No. 85.—M., æt. 30. In hospital four months and one week.—*Head*: Internal vessels all turgid, those of pia mater being injected with blood to minutest ramifications. Pia mater also considerably infiltrated, and adherent so firmly to surface of brain that portions of grey substance were torn away on being detached. This state also general in cerebrum and cerebellum. Lateral ventricles much distended, opening of communication under fornix large and circular, with at least an ounce of fluid in each cavity, of which a quantity also remained at base of skull after removal of brain.

No. 86.—M., æt. 71. In hospital fifty-one years and ten months.—*Head*: Upon skull-cap being detached bloodvessels, passing into cranial bones at sutures, so full and numerous as to give dura mater in those situations a bright redness, contrasting strongly with paleness of membrane generally noticed. Some infiltration of pia mater. Increased quantity of fluid in ventricles. Cerebral substance rather soft.

No. 87.—M., æt. 9. In hospital thirty-four days.—*Head*: Dura mater adhered so firmly that it was difficult to detach skull-cap. Vessels of bone all filled with blood. Channels for superior longitudinal and lateral sinuses strongly marked. Cranial contents filled cavity so very closely, that tense dura mater bulged over sawn edge of bone. Not the slightest moisture between membrane and its contents, which adhered closely to latter. Convolution perfectly flattened over whole surface of brain. Large effusion of blood in substance of left cerebral hemisphere at level of corpus callosum, and parallel with lateral ventricle, but did not communicate; quantity nearly four ounces, and recently coagulated. There was also about an ounce of watery fluid tinged with blood. In exterior lobe of brain, near extravasation, a small narrow cavity, about an inch in length, also existed, lined by thin smooth covering, surrounding substance being of dull buff colour.—*Chest*: Lungs did not collapse. Heart and pericardium much larger than usual, and in direct contact with sternum. Left ventricle hypertrophied.—*Abdomen*: Liver depressed about three inches below cartilaginous border of thorax.

No. 88.—M., æt. 52. In hospital two months and three weeks.—*Head*: Internal vessels turgid. Slight partial opacity of arachnoid. Considerable general infiltration of pia mater. Lateral ventricles greatly distended, from containing nearly four ounces of perfectly pellucid fluid. Septum lucidum increased in depth by distension, and so thin as if about to give way. Two cavities communicated directly by circular aperture.—*Chest*: Close old adhesions of both lungs. Muscular substance of heart flaccid, and rather pale.

No. 89.—M., æt. 55. In hospital thirty-three years and ten months.—*Head*: Dura mater adhered so firmly to bone that membrane was torn into shreds on separating skull-cap. Arachnoid transparent. Slight effusion of serous fluid into pia mater between convolutions, which were partially atrophied. Cerebral substance firm and white. Lateral ventricles contained nearly three drachms of slightly turbid serum. Vessels upon surface of brain full of fluid blood. Patches of soft, yellow, recently-effused fibrin, about the size of a shilling, in arachnoid sac, at base of brain.—*Chest*: Dropsical effusion in pleural sacs. Pericardium similarly distended. Heart twice natural size. Valves slightly thickened. Both lungs inflamed, with recently-effused yellow fibrin in some parts, other portions being soft, pliable, and of a deep-black hue.—*Abdomen*: Liver dark-coloured, and veins full of blood. Spleen puckered on surface, as if by a cicatrix; interior friable, and of light reddish-brown or yellow colour. Kidneys about half normal size. Capsules adhered firmly to outer surface; rough and granular. Right kidney full of blood, and dark-coloured.

No. 90.—F., æt. 38. In hospital five months.—*Head*: Skull-cap heavy, compact, and without diploe. Dura mater red from injection of bloodvessels. Arachnoid milky white. Convolutions flattened, compressed, and bulged over sawn edge of cranium. Ventricles much distended by three to four ounces of limpid serum. Vessels of cerebrum full of blood, and much fluid in basis cranii after removal of brain.—*Chest*: Right pleura and lung inflamed. Organ heavy; pulmonary substance dark-coloured, friable, and easily breaking down on pressure.—*Abdomen*: Small fibrous tumour in uterus.

No. 91.—F., æt. 40. In hospital twelve months.—*Head*: Slight opacity of arachnoid over cerebral hemispheres. Infiltration of pia mater in same situation. About eight or ten drachms of perfectly pellucid fluid in lateral ventricles. Fornix elevated, and so made foramen of Monro a direct communication between two cavities.—*Chest*: Both lungs congested, contained but little air, and easily broke down under pressure. Upper lobe of left lung contained tubercles, with purulent excavations.

No. 92.—M., æt. 50. In hospital nineteen years and eight months.—*Head*: Dura mater adhered so firmly, that shreds were torn away by removing skull-cap. Slight infiltration of pia mater on cerebral hemispheres. About an ounce of limpid fluid in each lateral ventricle. Bloody points on cut surfaces of brain numerous.—*Chest*: Heart considerably enlarged, and valves diseased; aortic having an osseous deposit. Right pleura inflamed, and contained about a pint of slightly discoloured effusion. The entire lung also inflamed, and near anterior part gangrenous. Left lung universally and strongly adherent.—*Abdomen*: Liver slightly irregular on surface, and of mottled colour, like nutmeg. Gall bladder small, and filled with concretions. Dropsical effusion in lower part of cavity.

No. 93.—M., æt. 35. In hospital three months.—*Head*: Skull-cap vascular and heavy. Vessels of dura mater turgid. Slight general thickening and opacity of arachnoid, with considerable infiltration of pia mater, so that hemispheres presented perfectly smooth surface, as if covered by whitish-grey gelatinous substance. Choroid plexus pale, and bloodvessels of brain empty. Increased quantity of fluid in ventricles, so as to make opening of communica-

tion direct; and much also remained in base of skull after removal of brain.—*Chest*: Several elongated and slender adhesions of left lung.—*Abdomen*: Intense vascular congestion in portion of ilium near termination. Mucous membrane of colon destroyed by ulcerations irregularly over whole extent of bowel, intervening portions being thickened, prominent, and of livid colour.

No. 94.—M., æt. 52. In hospital nine weeks.—*Head*: Vessels of brain slightly turgid, particularly traversing cerebral substance. About an ounce of fluid in lateral ventricles, and nearly an equal quantity in base of skull after removal of brain.—*Chest*: Left lung consolidated, of very dark, almost black, colour, and yielded an offensive odour. Right lung consolidated throughout, with portions so discoloured and foetid as to appear on point of mortification.

No. 95.—F., æt. 58. In hospital eight months.—*Head*: Vessels on surface of brain distended with blood. Partial opacity of arachnoid. Pia mater infiltrated by serum in every part, which extended down between convolutions. Cerebral substance firm.—*Chest*: Some old adhesions of pleuræ in both cavities. Lungs tuberculous, cut surface solid and mottled. Heart pale.—*Abdomen*: Kidneys large and pale. Corpus laterum in right ovary.

No. 96.—M., æt. 55. In hospital four months and three weeks.—*Head*: Dura mater adhered so firmly to bone that it was torn before brain could be exposed. Large quantity of serous fluid escaped from cranial cavity. Arachnoid slightly opaque. Cerebral substance firm. Ventricles large. Much fluid at base of skull and in vertebral column.—*Chest*: Heart deep red. Ætheromatous earthy deposit on coronary arteries, and considerable hypertrophy of left ventricle.—*Abdomen*: Mucous membrane of large intestine thickened, in parts ulcerated, and in others sloughed.

No. 97.—M., æt. 59. In hospital ten months.—*Head*: Internal vessels congested. Slight infiltration of pia mater. Increased quantity of fluid in lateral ventricles, and about two table-spoonfuls at base of skull after removal of brain.—*Chest*: Both lungs inflamed, and right partly hepatized.—*Abdomen*: Large intestine slightly thickened and extensively ulcerated; mucous membrane of nearly livid colour. Kidneys under natural size.

No. 98.—F., æt. 64. In hospital four months and three weeks.—*Head*: Much blood escaped on opening cranium. Vessels of bone and dura mater turgid. Skull-cap thick, dense, and heavy. Convolution of cerebral hemispheres shrunk in two or three places; vacuities being occupied by infiltration of pia mater. Much fluid about velum and in base of skull. Yellow ætheromatous deposits to considerable extent in cerebral arteries.—*Chest*: Heart very large, and measured nearly five inches from apex to base. Ventricular valves diseased. Endocardium of left ventricle opaque, thickened, and indurated to whole extent. Adhesion of pericardium to organ. Several ounces of fluid in each pleuræ, and both lungs inflamed.—*Abdomen*: Liver of nutmeg appearance, and kidneys small.

No. 99.—M., æt. 39. In hospital two months.—*Head*: Vessels, both external and internal, empty. Partial opacity of arachnoid covering hemispheres. Some infiltration of pia mater, and augmented quantity of fluid in ventricles.—*Chest*: Both lungs tuberculated, with numerous excavations containing purulent effusions. Right, but especially left, strongly adherent at diseased part.

No. 100.—F., æt. 42. In hospital twelve months.—*Head*: Vessels of skull and membranes loaded with blood. Slight milky opacity of arachnoid on cerebral hemispheres. Considerable infiltration of pia mater. About two ounces of pellucid fluid in each lateral ventricle.

(To be Continued.)

ON THE CONNEXION BETWEEN MORBID PHYSICAL AND RELIGIOUS PHENOMENA.

NO. II. OF A SERIES.

BY THE REV. J. F. DENHAM, M.A., F.R.S., &c.

IN the last paper on this subject it was attempted to show this connexion in regard of those religious phenomena which are of a gloomy or distressing nature: it will now be endeavoured to trace it in reference to those which are of a more pleasing and elated kind. The distinction of both these classes of religious phenomena is, that they exist separately from any definite perceptions of the understanding, and consist wholly of unintelligent feelings and emotions. It is thus stated by two eminent divines of the Church of England:—"If you desire to know the differences between the heaviness of a melancholy humour and affliction of conscience for sin, take notice of such as these:—the melancholy man is extremely sad, and *knows not why*. He is full of fear, doubts, distrust, and heaviness, *without any true or just ground*, arising only from the darkness and disorder of the imagination—the grisly fumes of that black humour in the brain. But a broken heart, in almost every case, can readily tell you the particular sins that made it bleed. His trouble is ever upon cause clear and evident. A melancholy man will ride many miles, walk many hours, and at length be able to give you no account of the exercise and discourse of his mind, or what his thoughts have been all the while."* Archbishop Sharp thus states the same distinction in regard of elated emotions:—"How shall we be able to know when the joy and satisfaction we feel in the exercise of religion doth arise from the Holy Spirit, and when from our own tempers? This is a material question, and thus I answer it. All those joys that we *can give no good account of*; that arise in our minds we know not how or wherefore; and likewise all those joys which do not more incline us to love God and our neighbour, do not dispose us to hate vice and impurity, and especially the more spiritual impurities of pride and self-love, which we may labour under;—I say, all these joys and consolations, how high and rapturous soever they be, are justly to be suspected by us, as the pure results of our own heated temper, the ebullition of our own animal spirits. The peace and joy of the Holy Ghost is *always rational*, there is some good ground, some solid foundation for it in the mind of the man that feels it; which foundation is a good conscience, a being able to satisfy ourselves, from the testimony of our hearts and lives, that we are sincere and unfeigned in our desires and endeavours to approve ourselves to God as his faithful servants. It is never a barren, ineffectual joy, a joy that only amuses and pleases us without making us better; and if that joy which we sometimes feel in the exercise of devotion be not of this nature, and have not these qualities, let it be otherwise never so affecting and transporting, we cannot be assured that it is from God; nay, rather we have reason to conclude that it is the natural effect of our own temper and natural powers. It is past dispute that these overflowing joys and comforts that are sometimes felt upon the application of our minds to spiritual things, are the mere effects of a heated brain and a raised imagination, for it is certain that in some persons these effects, even in the highest degree of them, owe their production to no higher a cause. Witness the transports of joy and the pleasures—even to ecstasy—which many enthusiastical persons have felt, or at least have given out that they have, in the exercise of the grossest superstition (of a false religion),

* Bolton's Treatise on Affliction of Conscience. Written 1620. Edited, with Introduction and Memoir of the Author, by Rev. J. F. Denham. London. 1831. page 142, &c.

and which many of the same complexion have experienced likewise in the true religion; who yet have been persons of none of the best morals, but in truth wholly devoid of the spiritual life. Now, I say, to attribute these raptures and ecstasies of joy in such persons to the Holy Spirit of God, will be very hard, at least now-a-days, when miraculous powers have ceased. No; certainly, all spiritual joy is not the joy of the Holy Ghost; a man may be sometimes so full of joy that his soul is even ready to break its prison, and yet, for all that, be not a whit the more acted by a divine spirit.*

This characteristic, then, of morbid religious feelings, both melancholy and elated, that neither of them are rational, being assumed, it seems to follow as a just conclusion that both kinds of them are symptomatic of disease; and this conclusion in regard of the latter kind of them seems strengthened by the following considerations; they are always accompanied by similar morbid feelings and emotions in regard of other objects and subjects, and with unaccountable sympathies and antipathies; are chiefly incidental to persons of weak or uncultivated minds, of a highly excitable temperament naturally, or in consequence of debilitation, to the subjects of constitutional indolence aggravated by the absence of regular and active employment; to females and to effeminate males of sedentary avocations; to miners and others living and labouring in a vitiated atmosphere, and amid cheerless or unvarying scenes. Such feelings are often combined with hysteric, &c., affections, and with evident indications of functional or organic diseases, especially of the organs of circulation, and of the arterial system connected with the stomach and its region. They are frequently found along with a debility of moral principle in regard of truthfulness, honesty, temperance, or with an insensibility to relative duties. Such persons have generally imbibed the notion that their peculiar feelings and emotions are the infallible index of piety and indubitable marks of divine favour. To use the words of an eminent prelate,—“They seem to think themselves bound to feel all they read in the Scriptures, without regard to the difference between the present and past economy of things;”† and possess, for a time at least, the power of raising in themselves these ecstatic emotions by an effort of their own will. They often exhibit a tendency to *malinger*, and in other respects possess the simulative sensibilities of actors and actresses in remarkable perfection. I am emboldened by theological and medical authorities to express my conviction that the generality of those persons in whom what are called the religious emotions are peculiarly developed, are the subjects of physical disease; and that an immense number of religious books, sermons, &c., are indebted for their popularity to the diseased susceptibilities of their readers and hearers. Such morbid states are often peculiarly manifested in regard of prayer and psalmody, the former being in many cases a merely self-mesmerizing process of unintelligent emotions, and the latter a mere physical hilarity irrespective of words and ideas. There is not a town, or perhaps a village, in the empire in which such instances of morbid religious phenomena are not to be found; and it is impossible to set a limit to the delusions which the subjects of them may undergo. The great evil of them, next to their fallacy, consists in their tendency to destroy the true religious capacity, and in their powerful conduciveness, in common with all other kinds of excitement, to those vices and crimes to which the temperament, whether of mind or body, may be liable, or to which the circumstances of individuals may peculiarly expose them: nor should their too-possible termination in insanity or suicide be forgotten.

The difficulty, if not impossibility, of effectually ministering to confirmed cases of this nature, arises from the fixed belief by the patient (with which they are commonly attended) of the sacred origin of such feelings, and from the

* Casuistical Sermon, III., vol. 3. London. 1716.

† Bishop Warburton on Grace, page 112.

gratification which they so readily and largely afford to his perverted mind. Our prospect of success is limited to the incipient stages of his disease, when, perhaps, an occasional scepticism intrudes itself respecting the supernatural origin of his emotions. The proximate cause of the malady would seem to be what has been called "reflective consciousness, or internal observation." Positive consciousness, as in the case of *mauvaise honte*, disturbs and perverts the operation of all our mental and moral powers, as also of our physical. Introspection produces that emotion to which the state of the physical constitution is at the time inclined, especially if the desirableness of that emotion be also previously believed. When this examination of the consciousness is regarded as a duty, in consequence, perhaps, of a misapprehension of certain passages of Scripture, a morbid state of the feelings is promoted with every act of it. The means of cure or prevention, as indicated by the nature of the disease, are to substitute religious acts and moral duties, as these are dictated by reason, conscience, and the Scriptures, for all attention to the phenomena of consciousness, reveries, or abstract contemplations. The perusal of religious publications of a sentimental or romantic character should be strictly prohibited, as well as all attendance upon those services, sermons, orations, &c., which appeal rather to the imagination than to the judgment and reason. Change of scene and cheerful society, scientific lectures and active occupation, both of the mind and body, upon external objects, seem fitted to divert the mind's attention from itself, and to break the chain of its diseased associations. Nor is the use of sarcasm utterly unavailing, especially that kind of it generally too applicable to such cases, which is derived from the inferior moral conduct of those who make pretensions to the most spiritual emotions. But no applications to the mere mental constitution of the patient will be effectual unless aided by an alleviation of that physical malady which is the real root of the disorder. This can only be treated according to its particular nature. As a general rule, however, the entire abstinence from all physical stimulants, to some of which such patients often show a marked propensity, may be safely recommended. All direct tonics, as well as all opiates, generally augment the disease. Tea is frequently injurious. The late eminent clergyman, Mr. Cecil, speaks of "females sitting over a fire all day, and drinking tea, and then mistaking their morbid feelings for divine influences."*

I beg to add the application of the foregoing principles, &c., to the subject of life's closing scene, in which a large portion of the community expect that the religious sincerity of the sufferer will become apparent, the power of religion will, by divine favour, be peculiarly evinced, and an antepast will be afforded of future bliss, which will even leave its last gleam upon the very countenance of the departed. This expectation is nourished by obituaries and memoirs, and in direct opposition to numerous well-known instances of persons of undoubted worth and piety, in regard of whose last feelings and post-mortem aspect "the King of Terrors" plainly showed that he is no respecter of persons. I will merely advert to some circumstances and considerations which may lead to a distrust of all the appearances of the death-bed, and of all inferences from them. These considerations are partly derived from the nature of the disease and the correspondent alterations it produces of the blood, &c., and consequently of the action of the brain, and thereby of the mental feelings and perceptions, whether as hyper-oxygenated or super-carbonized: of which former state every regular case of phthisis of the lungs affords an illustration, as does also every case of obstructed liver, of the latter. I have rarely seen the former case, and its characteristic exhilaration of spirits and exaltation of ideas, even to the last moment of life, without being reminded of the remark I once heard made by an eminent medical attendant, that "consumption is a poetical

* Cecil's Remains.

disease;" nor of the latter, without remembering the effects on the mind attributed to *black-bile* by the ancients. To these causes of cerebral and mental disturbance must be added the solitude and sameness of the sick-room and its sickly atmosphere, the medicines administered, the peculiar food prescribed, the stimulants ordered and often administered in additional quantities by friends and attendants, and the natural tendency of debility itself to produce delirium; and we have only need to consider the inevitable consequences on the mind, perhaps of a long course of such treatment, in order to feel convinced that but little reliance is to be placed upon the dying man's expressions or feelings, either as being, when "triumphant," a prelude to the bliss of Paradise; or as being, when despondent, the dark indication of "a monstrous life."

This reliance becomes still further diminished by the well-known quality of strongly-excited feelings to represent themselves to the mind as ideas, and even as actual impressions on the senses, and of any violent alternations of the feelings to assume the form of a dialogue to the imagination. I subjoin a few published and well-attested incidents illustrative of the foregoing observations, &c. The first is of the effects of delirium.

"Samuel Hitchens, a smith by trade, was taken ill, and caught a *malignant fever*, in which he cries out, 'I have not the least doubt of my salvation.' He cries out aloud, 'Open the heaven, O my God, and come down into my soul. Come, Father, Son, and Holy Ghost, and plunge me into God!'"

The following seems an instance of false perception:—

"A man fell ill of a high fever; addressing himself to the people around him, he says, 'Can't you see Jesus Christ coming, with an innumerable company of angels, and the golden banner displayed? They are coming to carry me to the bosom of my God. Open their eyes, O God, that they may see them. I am whiter than snow,—I am washed in the blood of my Redeemer. Why, I am all God.'—"Bishop Lavingdon's Enthusiasm," &c., Part III., p. 93.

I subjoin the following valuable remarks upon the feelings in death:—

"I would not alter my opinion of a man's spiritual state, whom I had thoroughly known before, for the manner of his death. The end of a holy life and unblamable conversation may not appear in the eye of man so calm and comfortable as was expected. Some such men may end their days in ravings, impatiencies, and other strange behaviours. The fiery distempers of their hot disease may sometimes, even in the saints of God, produce furious conduct, fearful distractions, and despairful speeches, these being the natural effects and issues of melancholy excesses, frenzies, and burning fevers."* The following observation of Lord Bacon may confirm the view already taken of the delusibility of human feelings, and induce us to rely on the more solid ground of conduct and duty:—

"The mind, darkened by its covering, the body, is far from being a flat, equal, and clear mirror, that receives and reflects the rays without mixture, but rather a magical glass, full of superstitions and apparitions."†

* Bolton, p. 152, &c.

† Works, vol. I., p. 132. Shaw's edition.

AMERICAN INSTITUTIONS FOR THE INSANE.*

1. ALTHOUGH the report for 1854, by Dr. Benedict, of the New York State Lunatic Asylum, is less elaborate than that which preceded it, and a considerable portion of it occupied by an exposition of the necessity of new apparatus for heating the buildings, and other subjects of comparatively local interest, yet it furnishes us with some items of value in the physical department of the profession.

	Men.	Women.	Total.
Patients at the commencement of the year	202	227	429
Received in the course of the year	185	181	366
Whole number	387	408	795
Discharged, including deaths	167	193	360
Remaining at the end of the year	220	215	435
Of the patients discharged, there were cured	58	54	112
Died	24	24	48

Applications for the admission of forty-seven patients, of whom sixteen resided in other States, were rejected.

The proportion of recoveries is smaller than usual, "for the reason," in the words of Dr. Benedict, "that we have been cautious in pronouncing a case recovered, though apparently well. We place all the cases of insanity from intemperance, from epilepsy, from general and gradual impairment of the faculties by age, and paroxysmal cases, though leaving the institution *well*, under the head of *improved* instead of *recovered*. The reason is obvious; there being no certainty that they will remain well for any length of time." This is "drawing the lines" a little closer, in regard to recoveries, than they have sometimes been drawn; as, for example, in an old report of one of our American asylums, in which one patient is recorded as "discharged—recovered," some six or eight times in the course of the year.

"The perfection and permanency of recoveries not unfrequently is cause of doubt and anxiety. Of the 1300 recoveries of the past nine years, 206 have been readmissions. Of the 51 readmissions of this year, 11 were persons who had been discharged well, in 1850. Two of these 11 were discharged recovered, in 1846 and 1847, one in 1847 and 1849, one in 1846, and two in 1849, making, in 11 persons, 20 recoveries, and 31 admissions."

The foregoing extract contains a detail which is too often neglected by the writers of these reports, but which is absolutely necessary to convey an accurate idea of the curability of insanity to the uninitiated reader.

Of the 112 cases of recovery, the duration of insanity before admission was one month and under, 36; two and three months, 44; four to seven months, 18; seven to twelve months, 9; over twelve months, 3; unknown, 2.

The time of residence at the Asylum, of the same cases, was—two months and under, 10; three months, 6; four to seven months, 54; seven to twelve months, 27; one to two years, 13; two years, 2.

"Dysentery, diarrhœa, and erysipelas," continues the report, "are the diseases with which we have to contend most frequently, *and when our ventilation shall be improved we hope to see these disappear*. We have had, during the

* By Dr. Pliny Earll, in No. 32 of "The American Journal of Medical Science," edited by Dr. Hays:—

1. Of the New York State Asylum, for 1851 and 1852.
2. Of the New York City Asylum, for 1851 and 1852.
3. Of the New Jersey State Asylum, for 1851 and 1852.
4. Of the Pennsylvania State Hospital, for 1851 and 1852.
5. Of the Frankford Asylum (Pa.), for 1851 and 1852.

year, 41 cases of dysentery, 25 males and 16 females. Duration of the disease varied from three to twenty days; average, nine days. One case in December, 1 in February, 3 in April, 1 in May, 1 in June, 2 in July, 23 in August, 10 in September. Fifty-five cases of diarrhœa; 23 males, 32 females; duration from two days to two months. These cases occurred during the severe months with those of dysentery, 39 of them in August. Twenty-four cases of erysipelas—9 males, 15 females; 3 of them were in December, 1 in January, 6 in March, 3 in April, 4 in May, 2 in June, 1 in August, 1 in September, and 3 in October. Average duration, eleven days. Six cases of typhoid, 3 of remittent, and 1 of intermittent fever. Acute affections of the lungs have been rare."

Causes of death.—Dysentery 6, diarrhœa 1, erysipelas 1, phthisis pulmonalis 11, chronic insanity 10, acute mania 1, general paralysis 2, epilepsy 5, pleurisy 1, malignant pustule 1, rheumatism 1, intemperance 1, suicide 5.

"The general prevalence of the suicidal propensity which was mentioned in my last report (and quoted in our former notices) as subsiding, returned with increased intensity, and continued throughout the winter and spring. In one case the act was committed soon after the admission of the patient, in whom there was no knowledge of the existence of the propensity. Another had been, during a residence of many months, remarkably cheerful and happy; an attack of erysipelas of the face confined him to bed, and rendered him very uncomfortable, and, at the height of the disease, he suspended himself from his window. All the suicides were by suspension from the window-bars, except one. To guard against such accidents, we have now adapted to a part of them sash-locks, which secure the windows from being opened and exposing the bars."

Statistics from the report for 1852:—

	Men.	Women.	Total.
Patients at the commencement of the year	220	215	435
Received in the course of the year	200	190	398
Whole number	420	405	825
Discharged, including deaths	205	195	400
Remaining at the close of the year	215	210	425
Of those discharged, there were cured	92	64	156
Died	22	17	39

Sixty applications for admission were rejected.

"Of the 156 patients recovered, 92 are recorded *well*, and 64 *in usual health*. It may be proper to enter all these as *recovered*, they all having regained that state of mind possessed by them before their insanity; and yet many of them cannot be said to have that stability of character accompanying a sound mind. Under this head, *usual health*, we place that large class of weak-minded persons who run mad after every novelty, and again recover their equilibrium by seclusion in an asylum; and also others who leave apparently well, but are likely to become again deranged under exposure to the cause of previous attack. This division of recovered cases seems better than reporting the latter improved, as in our last report, which, in this respect, was a departure from established usage.

"The mortality for the past year is much less than for several previous years, while the amount of sickness has been about the same as last year. The principal diseases which prevailed during the year were: dysentery, 41 cases; diarrhœa, 45 cases, most of them in July and August; erysipelas, 21 cases; and typhoid fever 10."

Causes of death.—Phthisis pulmonalis 9, chronic insanity 6, epilepsy 5, phlegmonous erysipelas 4, opium-eating 3, dysentery 2, chorea 2, disease of heart 2, intemperance 2, acute dementia, general paralysis, apoplexy, and old age, 1 each. The number of deaths from acute disease is remarkably small.

"We are highly favoured in being able to report no deaths from suicide. This year only, since the second of the Institution's history, has passed without such an accident. Nor do we report any deaths from exhaustive mania ('typhomania,' 'phrenitis,' 'Bell's disease,' of other reporters). The number treated was eleven, some of whom had been greatly depleted previous to admission. We cannot urge our medical brethren too strongly to abstain from the practice of taking blood from insane persons. Our plan of treating very active insanity is directly opposed to depletion. Not one ounce of blood has been drawn from the 825 patients under treatment during the last year (fifty-four of these were of less duration than one month). We resort to stimulation in many cases with great freedom, and have seen the best evidence of its propriety."

Patients admitted from Jan. 16, 1843, to Dec. 1, 1852	3499
Discharged recovered	1456
Died	407

To relieve the Institution from its most troublesome patients, such, too, as ought not to be associated with other insane persons, Dr. Benedict recommends "the erection of a hospital for 250 patients of the male sex only; to be carefully constructed, and fitted for the ultimate occupancy of lunatic criminals only; but to be used, until needed exclusively for this purpose, by criminal and homicidal lunatics, and drunkards." The suggestion is one well worthy of the attention of the public authorities in all the large States.

A scheme of moral treatment, including religious services; employment within doors and without, plays, tableaux, theatrical exhibitions, fairs, excursions, &c., is actively pursued. "The Opal," a magazine edited by the patients, is continued, and, by its more than three hundred exchanges, furnishes a great fund of transient reading matter, while the profits accruing from it during the year are sufficient to add several hundred volumes to a permanent library.

The legislature has appropriated thirty thousand dollars for the improvement of the means of heating and ventilating the buildings of the Asylum.

	Men.	Women.	Total.
2. At the New York City Lunatic Asylum, Blackwell's Island, the number of patients on the 1st of January, 1851, was	200	264	464
Admitted in course of the year	216	225	441
Whole number	416	489	905
Discharged, including deaths	183	205	388
Remaining, December 31, 1851	233	284	517
Of those discharged, there were cured			208
Died	37	43	80

Of the cases discharged, ten were delirium tremens, all cured.

Causes of Death.—Consumption 25, general debility 15, paralysis 11, chronic diarrhœa 8, epilepsy 5, apoplexy 4, dysentery 3, old age 2, pneumonia, phrenitis, carcinoma, hydrothorax, continued fever, gastritis, and albuminaria, 1 each. Of the patients admitted, 98 were natives of the United States, and 343 of foreign countries.

A considerable portion of Dr. Ranney's report is devoted to a history of the improvements of the Institution during the preceding five years—improvements, the result of which is that, "the very worst class of patients are as comfortably situated, at present, as were the best class in 1847."

Dr. R. suggests to the philanthropic a field for the useful employment of their benevolence, in taking charge of the poor insane, who, recovered from their mental disorder, are discharged from the Asylum without pecuniary means, or a place of employment. We most cordially "second that motion," and recom-

mend it to the consideration of the benevolent in all places where there is a large institution for the insane, among the patients of which there are many from the poorer classes. Associations for the purpose alluded to have been formed in Europe, at Eberbach, in the Duchy of Nassau; at Stephansfeld, near Strasbourg; and at Vienna. It is said that they have been eminently useful.

Dr. A. V. Williams, one of the Visiting Physicians to this Asylum, resigned his place at the close of 1850.

Report for 1852:—

	Men.	Women.	Total.
Patients, January 1, 1852	233	284	517
Admitted in course of the year	241	254	495
Whole number	474	538	1012
Discharged, including deaths	248	237	485
Remaining, December 31, 1852 :	226	301	527
Of those discharged, there were cured : . .			248
Died	70	60	130

Of the persons admitted, 102 were natives of the United States; 1, of Canada; 2, of Nova Scotia; 3, of Jamaica; and 387 of various European countries.

Of the cured, 10 were cases of delirium tremens; 3, of febrile delirium; and, 1, of typhus fever. The last two classes are placed under the head of *improper subjects*; as, also, are two cases of epilepsy, discharged *improved*, and four persons *not insane*.

Causes of death.—General debility 38, consumption 26, paralysis 15, typhus fever 10, diarrhoea 6, old age 5, paralysie générale 5, epilepsy 4, typhomania 3, apoplexy 3, mania 2, delirium tremens 2, dysentery 2, phrenitis 2, convulsions, pericarditis, laryngitis, pneumonia, erysipelas, and dropsy, 1 each.

The increase in the number of deaths over that of 1851 is attributed "almost entirely to the admission of improper subjects. In September, there were seven deaths of patients admitted within the month—all from long-standing diseases—not one of which ought to have been sent to the Asylum. The only endemic form of disease was from the 20th of November to the 15th of December. During this period twelve cases of typhus fever occurred, from which there were three deaths, one of this number being a highly valued attendant of the hall in which the disease originated. The only assignable cause for its production was a change of water. The main pipe for the conduction of the Croton water to the island having been broken, the supply was obtained from a well under one of the wings of the Asylum. On the re-introduction of the Croton, the disease disappeared."

"Two years and seven months have elapsed since a suicidal death occurred in this institution."

After a long struggle in the attempt to free the Asylum from penal convicts as attendants upon the patients, they have at length been entirely banished from the wards of the main building. "The experiment has proved," according to the report, "beyond all cavil, that this change has not increased the expense." Thus the great argument for the employment of such nurses has been effectually demolished. Yet, at the time the report was written, they were still employed in the "Lodge"—where are the apartments of the most violent patients—and in the kitchen, laundry, &c., of the main building. Dr. Ranney urges their entire removal for many plausible, and, at least to many persons experienced in the care of asylums, very obvious reasons.

The following case, of some importance in a medico-legal point of view, is mentioned in this report:—

"A patient, who committed homicide in the city, died last November. He became jealous of his wife, and killed the man whom he fancied was her para-

mour. The case was a remarkable one from the fact that, although he was actually insane at the time the deed was committed, yet, by the advice of a friend, he feigned another form of insanity. He believed that he had frequently seen Jesus Christ arise from the flame of a candle; that God had given him (who?) full power over the man (which?); but when examined, he pretended not to comprehend anything said to him, and for several weeks would only say, 'I don't know, sir.'"

3. Of the thirty-five pages of the annual report from the New Jersey State Asylum, for 1851, only six are occupied by that of its superintendent, Dr. Buttolph, and half of these are devoted to improvements made, and additions required, to the buildings.

	Men.	Women.	Total.
Patients in Asylum, January 1, 1851 . . .	86	76	162
Admitted in course of the year . . .	50	52	102
Whole number . . .	136	128	264
Discharged, including deaths . . .	51	42	93
Remaining, January 1, 1852 . . .	85	86	171
Of those discharged, there were cured . . .	22	15	37
Died . . .	4	4	8

The number of patients in the course of the year was greater, by forty-four, than that of the preceding year.

Experience has proved that it is cheaper to light the buildings by gas, made upon the premises, than by oil.

From the nearly thirty pages of the essay upon the nature, forms, causes, means of prevention, and general principles of treatment of insanity, we cannot well make many isolated extracts. Nor are there many which would offer much novelty to persons who have already read Spurzheim or Combe. The following remarks upon attempts to define insanity are very just, irrespective of phrenology:—

"From this (the dependence of mental integrity upon the integrity of special physical organs) it will appear how utterly futile are attempts by physicians, physiologists, and jurists, to frame a definition of insanity so comprehensive as to embrace all supposable examples of the disease, and yet so particular as to be of practical utility in determining its existence in doubtful cases. Insanity, or mental derangement, being the opposite or counter state to sanity, or mental soundness; a knowledge of each individual standard of the latter must be had to enable us to exercise enlightened judgment of the existence and degree of the former in a given case. It may be remarked generally, therefore, that a state of insanity, or mental derangement, is that in which there is a departure, through disease of the brain, from the natural standard of thought and feeling of an individual, without his being conscious of the same, and in the loss of his ability to act freely in these circumstances. The expression of the sentiment embraced in this statement is deemed important, so far as it suggests the necessity, in each case, of a careful comparison of the supposed insane with the natural character of the individual, rather than a reliance upon a definition or rule of judgment that may not apply to his state or standard of mind.

"In criminal suits, involving the question of insanity, this rule or mode of procedure is quite as important to secure the ends of public justice, as to protect the rights of the culprit; because, conduct that would appear as the height of insanity in a majority of minds, may be in strict keeping with the standard of character in the person committing the offence, and indicate either an excusable degree of stupidity, or a most reprehensible state of depravity."

In regard to the question of isolation, we make the following extract:—

"When the mental derangement depends upon bodily disease of a temporary

character, the patient should not be removed from home until a fair trial has been made for its cure; or, should it be very severe and more continued, he should not make the journey to an asylum under circumstances likely to increase it. Persons of advanced age, who are insane from the irregular decline of the faculties, or who are partially paralytic, but who have no dislike to their friends, and are quiet and manageable, may be as well treated at home as at a public institution. Again, very delicate females, who are only partially insane, but who cherish a strong attachment to home and friends, are sometimes unfavourably affected by the separation from them, and by association only with strangers. There may be yet other cases of this class, but there are more of which seclusion is of doubtful expedience, and can only be correctly determined by a careful consideration of all the circumstances attending them.

	Men.	Women.	Total.
Patients in the Asylum, January 1, 1852	85	86	171
Admitted in course of the year	60	61	121
Whole number	145	147	292
Discharged, including deaths	54	56	110
Remaining, January 1, 1853	91	91	182
Of those discharged, there were restored	19	26	45
Died	11	15	26
Whole number from opening of the Asylum, May 15, 1848	264	251	515
Discharged recovered	81	80	161
Died	25	28	53

Twenty-five more cases were treated in 1852 than in any previous year.

The unusual number of deaths, the past year, was owing, "in part, to the great accumulation of chronic and enfeebled cases, and also from the occurrence of a dysenteric affection following the extremely hot weather of summer, and which proved fatal in nine instances of patients of this class." The other deaths were from congestion of the brain 3, epilepsy 4, consumption 4, chronic abscess, palsy, exhaustion, of acute mania, 1 each, and 3 from general exhaustion in dilapidated constitutions.

Dr. Buttolph urges the necessity of increasing the accommodations for patients by completing the original design of the building, in the erection of two additional wings. At one time, during the past year, the number of patients (208) was "more than benevolence would dictate, or than prudence would justify."

Stuart F. Randolph, Esq., a native of New Jersey, but for many years resident of New York city, has made a donation of two thousand dollars—with a pledge of five hundred more, should it be necessary—for the construction of a building, upon the Asylum grounds, to be used as a museum and reading-room by the patients.

4. After long, repeated, and persevering endeavours to establish a State Hospital for the Insane of Pennsylvania, success has at length been achieved—mainly through the untiring energy of Miss Dix—and we have the pleasure of bringing to the attention of our readers the first two reports of the superintendent of the institution, Dr. John Curwen.

We are informed in the first that the "Lunatic Hospital of the State of Pennsylvania" is situated about one and a half miles north of Harrisburg, upon a farm of one hundred and thirty acres. The corner-stone "was laid by Governor Johnston, on the 7th of April, 1849, and the building was delivered, by the architect and contractor, to the commissioners on the 19th of June, 1851." It "consists of a centre building, and a wing extending in a linear direction on each side. Each wing is so arranged that the second projection recedes twenty

feet behind the first, and the third the same distance behind the second, so that the second and third projections are open at both ends, which renders them light and cheerful, and insures, at all times, a free, natural ventilation. The centre building is of three stories above the basement, or ground floor, has a large Tuscan portico, with a flight of twenty steps to the main entrance, and is surrounded (surmounted?) by a large dome, from which a very extensive view of the surrounding country is obtained."

The main wing, on either side, is of three stories, including the basement; the first receding portion three stories, and the second receding portion, intended for violent and noisy patients, two stories.

The whole building is warmed by air, heated, in the air-chambers in the basement, by steam passing through sixteen thousand feet of cast-iron pipes, which are connected with two cylinder boilers, each forty feet long and forty inches in diameter. It is lighted by gas, brought from the works of the Harrisburg Gas Company. It is abundantly supplied with water, and has, in its attic, four tanks of an aggregate capacity of twenty-two thousand gallons.

Thus, built upon one of the most approved models, and furnished with all the means which experience has proved to be most convenient and useful for an establishment of the kind, the institution was opened on the 1st, and received its first patient on the 6th of October, 1851. The number admitted between that time and the close of the year was thirty-seven. One was "a boy, six and a half years of age, whose disorder of mind was caused by convulsions during dentition, and who is yet subject to a slight spasmodic affection; and another a girl of thirteen years, in whom the mental derangement arose from epileptic convulsions, but, since a severe attack of bilious fever, six months ago, the convulsions have not returned." One epileptic patient had died.

We now proceed to the report for 1852.

	Men.	Women.	Total.
Number of patients, December 31, 1851	24	13	37
Admitted in the course of 1852	65	53	118
Whole number	89	66	155
Discharged, including deaths	29	19	48
Remaining December 31, 1852	60*	47	107*
Of those discharged there were cured			13
Died			7

Causes of Death.—Exhaustion from acute mania, 1; paralysis, 1; latent pneumonia, 1; "exhaustion consequent on chronic mania," 4.

Dr. Curwen remarks:—

"Although the institution has been in operation more than a year, we have not yet found occasion to break through the rule which was adopted at the opening—never to use mechanical restraint, if it could by possibility be avoided. That cases have been received in which, by many, restraints would have been used, is freely admitted; but separation and seclusion for a few hours has generally accomplished the desired object, with much less irritation to the feelings of the patient, and less difficulty to the attendant."

The doctor's rule, however, literally interpreted, is somewhat too rigid. It admits of no exception. Mechanical restraints can, "by possibility," in every case, and always, be avoided. Yet there are patients to whom their application, even against the will of the party most immediately interested, is in accordance with, and the neglect of such application a dereliction from, the dictates of

* The report says 59 and 107—but such are not the results from the preceding data. The case of death by epilepsy, before the close of 1851, is probably retained in the number of patients at the beginning of the year.

true humanity; to say nothing of those who entreat their care-takers to bind their hands, lest they destroy the life of themselves or of persons around them.

The following remarks, if not novel, are nevertheless true:—

"I feel that I am discharging a part of my duty towards the insane, in calling attention to an error which is very extensively prevalent, and which consists in the almost invariable resort to bloodletting in all cases of insanity. All hospital experience, not only in this country, but also in Europe, has proved that the loss of blood, in any form of insanity, is almost uniformly attended with unpleasant effects, prolonging the period of cure, and, in many cases, placing the patient hopelessly beyond the reach of any benefit to be derived from subsequent treatment. Insanity is essentially a nervous disorder, and must be treated as such; and the greatest care should be taken to distinguish between that excitement which is purely nervous, and the delirium caused by inflammatory action. When any doubt exists, the abstraction of a few ounces of blood by cups or leeches, carefully watching the effects, will enable the physician to judge of the propriety of the course he is pursuing."

Let no one condemn this opinion of Dr. Curwen, on the ground that it is hastily formed, or based upon the experience of but little more than one year in a new institution. Previously to his connexion with the asylum at Harrisburg, he had been for several years the assistant physician of the Pennsylvania Hospital for the Insane.

The following extracts will show that the institution, even in its infancy, is as well supplied with the means of moral treatment as many have been in their adolescence, or manhood, and once more awaken our admiration for that benevolence, the copious current of which is now so freely running in the direction of the afflicted many who are suffering under psychic disorders.

"Religious services have been regularly maintained, on the Sabbath, during the whole year. * * * Evening prayers have also been regularly kept up during the year, to which all who feel inclined are invited to come.

"The Philadelphia fund for the benefit of the patients, collected through the instrumentality of that ardent friend of the insane, and of every benevolent work, Miss D. L. Dix, has already furnished essential advantages to the patients, in the use of a carriage and pair of horses, quite a number of musical instruments, two polyoramas, a large dioptric magic-lantern, with a number of slides, a small magic-lantern to be used in the wards, kaleidoscopes, backgammon-boards, and a number of other games, a large number of books, engravings, two large walnut book-cases, each capable of containing 250 volumes, and two globes. * * * A large piano, with an æolian attachment, has been ordered for the chapel. * * * A certain portion of this fund has been placed at my disposal for the erection of a reading-room and museum for each sex on the grounds of the institution."

5. The number of patients in the Frankford Asylum, on the 1st of March 1851, was 43; admitted during the year, 44; whole number, 87; discharged, including deaths, 35; remaining, March 1, 1852, 52. Of those discharged, 14 were cured and 6 died.

One died of fever, one of phthisis pulmonalis, one of exhaustion, one of effusion on the brain, and two by suicide.

"It is worthy of remark," says Dr. Worthington, "that the death from consumption is the first that has occurred among our patients from that disease for ten years past, especially as it is considered to be one of the most common causes of death among the insane.

"*Exhaustion* is a term which has been used to designate the cause of death in a peculiar form of disease, which appears to consist principally of in-

tense excitement of the nervous system, with a tendency to rapid prostration of the vital energies, generally terminating fatally in the course of a few days."

It is well, when one uses a generic term with a specific signification, to explain its meaning, as Dr. Worthington has done in this instance. It is very evident that his "*exhaustion*" is nothing more nor less than the "*typhomania*," "*phrenitis*," "*Bell's disease*," "*exhaustive mania*," already alluded to. The same word, "*exhaustion*," is not unfrequently used by other reporters in, as we understand it, a very different sense. With them, we have always supposed it implied those cases of death in which there had been a gradual, but slowly-progressive wasting of the vitality of the body, without any evident, specific, organic lesion; in short, what other reporters still have called "*marasmus*"—a disease, by the way, which appears to have greatly diminished, since, although, according to the reports, it was in former years fatal to large numbers, not one case of death from it is mentioned in either of the reports reviewed in this article!

Dr. Worthington informs us that an unusually large number of suicidal patients were treated in the course of the year, and that six of them were cured.

One of the patients who died had been at the asylum about twenty-five years, and was 73 years of age; while, of the 52 remaining at the close of the year, 12 were upwards of 60. These facts, no less than that in regard to the exemption from pulmonary phthisis, are demonstrative of the salubrity of the location of the asylum, and of the excellence of the hygienic treatment.

On the 1st of March, 1852, there were 52 patients; admitted in the course of the year, 28; whole number, 80; discharged, including deaths, 24; remaining, at the close of the year, 56. Of those discharged, 15 were cured and 5 died.

"Of the five deaths, two were from phthisis pulmonalis, one of organic disease of the brain, one of epilepsy, and one of carditis. The two cases of consumption were admitted with that disease, and died, one eleven days, and the other about a year after entering the institution."

Since the opening of the institution, in 1817, "eleven hundred and sixty-nine patients have been admitted; of whom five hundred and fifteen have been discharged restored, and one hundred and fifty-five have died."

Although the report before us is well adapted to the persons for whom it is most particularly intended—those who have friends at the asylum, and those who are seeking the benefits of such an establishment—yet the subjects treated aside from those already noticed, furnish nothing of importance that would be new to our readers.

CEREBRAL PATHOLOGY.

DR. SEMPLE read a paper on the subject of *The Pathology and Diagnosis of Cerebral Diseases*, before the Medical Society of London, Nov. 14, 1853. He commenced by observing, that the present paper might be considered as a continuation of a former communication to the Society on the same subject. He did not intend to present an elaborate essay on cerebral pathology, nor to avail himself of the opinions of authors who had written upon the subject, but merely to present the results of his own experience and observations; particularly selecting those points which were the most obscure, or on which a difference of opinion still existed. It was often a matter almost of impossibility to connect the symptoms of cerebral disease observed during life with the appearances found after death; but, as the term "*pathology*" included the morbid phenomena of the living structure, as well as the lesions traced after death by the

scalpel, it was necessary to consider them in their relations to each other, however obscure the relationship might appear. In some cases, the relation of cause and effect was sufficiently manifest; and Dr. Semple drew attention, in the first place, to diseases of the osseous structure as causes of cerebral disorders. In one case which had come under his notice, and which he had observed for about ten years, the patient had been subject to continual attacks of epilepsy, which had resisted all treatment, and which had at last proved fatal. On a *post-mortem* examination, it was found that the internal table of the skull was thickened, and all the prominent bony processes in the interior of the cranium were much increased in thickness and asperity, as the *cristi galli*, the clinoid processes, the ridges on the petrous portion of the temporal bone, and on the occipital bone. In another case, he attended a patient who suffered from constant pain and heaviness at the anterior and inferior part of the forehead, and who had occasionally had epileptic fits. These inconveniences became so troublesome by their long continuance, that the sufferer was obliged to abandon his business, and life became a burden to him. Acting upon the supposition that this was a case of thickening of the internal table of the skull, mercury was given to salivation, and the iodide of potassium was administered in large and repeated doses for a very long period, and under this treatment the patient eventually recovered, and is now in active occupation. In a third case, a man presented a manifest thickening of the root of the nasal bones; and notwithstanding the vigorous employment of the means pursued in the last case, he became comatose and died; and on a *post-mortem* examination, there was found to be thickening of the bones in the region indicated, and an abscess in the brain corresponding in situation to the osseous lesion. Another circumstance which Dr. Semple had occasionally observed in cerebral diseases, was a want of symmetry in the two sides of the cranium; and although he was not yet prepared to prove that this was a common cause of cerebral disease, yet he thought it worthy of attention, and believed that other cases might be found in which similar deviations from symmetry might prove to be associated with disordered cerebral manifestations. The morbid anatomy of the cerebral membranes is a subject involved in great obscurity, because the most violent symptoms during life often leave very few traces observable after death; and, on the other hand, appearances usually described as morbid are sometimes wholly unconnected with any cerebral symptoms during life. In order to arrive at correct views on this subject, however negative the results might be, the author was in the habit of examining the brains of all cases, whenever it was practicable, whether there had been symptoms of cerebral disorder during life or not, and the conclusion at which he had arrived by these investigations was, that much error and misapprehension existed among authors on this branch of pathology. Such terms as "more or less opacity of the arachnoid," "effusions on its surface," "effusions beneath its surface," and other similar vague expressions, were by all means to be deprecated, because it was doubtful whether these appearances were really morbid at all in many instances, inasmuch as they are often found in cases where no cerebral disease has existed. The disease called acute hydrocephalus in children, was a well-marked instance of meningeal inflammation; and the results of such disease were apparent in the effusion of coagulable lymph between the opposed layers of the arachnoid, and of copious serous deposit upon the surface and in the cavities of the brain; but in adults, the effusion of coagulable lymph was comparatively rare, and the only appearances observed were vascularity of the membranes and effusion of lymph beneath the arachnoid. Dr. Semple inclined to the view of Rokitansky, that inflammation of the pia mater is the usual form of meningeal disease, the apparent vascularity of the arachnoid membrane being due to the injection of the vessels of the pia mater seen through the transparent serous structure lying above it. Four cases were then related, in two of which the author considered that meningeal inflammation undoubtedly existed; and yet

after death nothing was found beyond a slight effusion of lymph beneath the arachnoid, and in the two others no cerebral disease had existed during life, and yet the *post-mortem* examinations revealed thickening and vascularity of the arachnoid, accompanied by copious effusion. The diagnosis of cerebral diseases is a point of great difficulty, but of immense importance, and upon a correct judgment in this particular the life or death of a patient often depends. Insensibility and coma depend on various causes,—such as hysteria, poisoning, drunkenness, apoplexy; and all these conditions require very different and often opposite treatment. Again, delirium is produced by opposite states of the brain—by congestion and inflammation, on the one hand; by exhaustion of nervous energy on the other; and some well-marked cerebral disorders are produced by diseases in remote organs, and without any disease of the brain whatever. Two cases of what might be called pseudo-cephalic disease were then related, in one of which the most violent and long-continued convulsions were caused by the eccentric irritation of teething and intestinal derangement; in the other, an infant a fortnight old, the convulsions were apparently due to previous intra-uterine influences, and to the weak and nervous condition of the mother. In such cases, it was exceedingly important that a correct diagnosis should be made; for, although convulsions in infants were always dangerous, and a prognosis must be given with great caution, yet the gravity of the issue was most materially influenced by the nature of the existing disease. The convulsions springing from cerebral inflammation must be promptly treated by leeching, calomel, purgatives, cold to the head, warmth to the extremities; but all these remedies are utterly improper in those forms of convulsive attacks which originate from teething, intestinal derangement, renal obstructions, and other forms of eccentric disease.

The chief point in the discussion was the degree of difficulty attending the diagnosis of cerebral diseases.

Dr. Fuller was of opinion that in true meningitis there is always great congestion, with effusion of lymph, pus, or serum; and that in the absence of these products, we could not infer the existence of the disease from the symptoms. In poisoned blood from disease of the kidney, or from the presence of a narcotic poison, as belladonna, as also in certain rheumatic affections, he had observed great cerebral excitement, with injection of the conjunctiva—that is, all the mere symptoms of meningitis—but these were not true cases of inflammation. Moreover, the opacity of the arachnoid, which arises from an effusion underneath the membrane, is not an evidence of inflammation. He then referred to the probable cause of the greater violence of the cerebral irritation in meningitis than in cerebritis, and believed it to be the rapidity with which the various disturbances take place in meningitis. He had observed cases in which very great injury had been done to the substance of the brain, without any violent symptoms having been induced, and this he attributed to the slowness with which the injury had proceeded. Thus, in the case of a medical friend, who for many years had suffered only from symptoms resembling tic, and from slight epileptic attacks, he had found a pint of serum effused within the skull, with the circulation through the right vertebral artery impeded by the pressure of a scrofulous tumour, and the left vertebral artery nearly obliterated. He agreed with the author in his remarks upon disease of the calvarium, and instanced the case of a young lady who had suffered for many years from intense headache and epileptic fits, and who could not bear any jolting exercise, in whom a spiculum of bone, two inches in length, was found projecting into the brain.

Dr. Theophilus Thompson considered that thickening of the calvarium was not a likely cause of meningitis, for he had observed that thick-skulled people were dull, and not prone to inflammation; but if it were a cause, he did not think that iodide of potassium would remove it. He believed that affections

of the dura mater are among the most obscure of cerebral diseases, while inflammation of the other membranes of the brain is at present well understood. He thought that Mr. Rainey's statement as to the ganglionic character of the arachnoid, would clearly account for the great violence of the symptoms met with in arachnitis, and that it is the locality affected, and not the slowness of the progress, which renders the symptoms of cerebritis less prominent.

Dr. Druitt inquired if the author had been accustomed to connect rheumatism with disease of the skull. He (Dr. Druitt) had given colchicum and calomel with great advantage in such cases, and believed those remedies to be more beneficial than iodide of potassium. He considered that thickening of the skull is rarely, if ever, a primary disease; as also meningitis, when not preceded by external injury. If in any case he should observe great cerebral excitement, with congestion of the eye, he should consider the case to be one of poisoned blood, and not of true idiopathic meningitis.

Dr. Sibson believed it to be impossible to arrange the diagnostic symptoms of each cerebral disease in clearly-defined categories, for he had learned from practice and an analysis of almost all the recorded cases, that every kind of symptom has been found in every variety of cerebral disease. A few cases of epilepsy have thickening of the calvarium, but it is only a small minority; and in general, he believed it to be impossible to guess even at the existence of such an obscure morbid condition. He also considered that inflammations of the arachnoid and of the pia mater could not be separated, just as it is impossible to state that the sub-pleural cellular tissue is not involved in a case of pleuritis. Farther, in such cases, the surface of the brain is always implicated, and it is from this cause alone that the symptoms become more energetic. He regarded the effusion of lymph in a fatal case of meningitis as essential to the disease, and had seen cases in which this effusion had extended greatly, and yet only a slight stupor had indicated the presence of inflammation.—Nov. 16, 1853.

Simple Ventricular Meningitis. By W. HUGHES WILLSHIRE, M.D.—Simple acute meningitis is, under any of its forms, an unfrequent disease in childhood. At this period, the meningeal inflammation is usually of the granular or tuberculous character, or, at any rate, is subservient to the sway of the important diathetic disorder, scrofula. But if simple acute meningitis of the periphery alone, or combined with that of the base or of the ventricles is uncommon, that limited to the lining membrane of the latter is excessively rare. So rare, indeed, is it, that MM. Rilliet and Barthez have been unable to meet with a single case on record. The former, however, has been witness to one, terminating in ventricular effusion, loss of intelligence, idiocy, and death. The fatal event did not occur till the end of the fourth month, the disease assuming somewhat of a chronic character. The case seems more particularly interesting, as tending to support the views of those who believe chronic internal hydrocephalus to be due to inflammation of the ventricular living membrane. The following instance occurring to ourselves, differs in some important points from M. Rilliet's, and appears more fully to demand the qualification of *acute* to the terms ventricular meningitis.

C. W., a boy five years old, was brought to the infirmary in the month of January. His parents live near the institution. The child was said to have been ill for more than a week, and to have been an out-patient at the Charing-Cross Hospital. The prescription-paper of the latter showed that antimonials and salines had been given. The patient was very thin, pale, and weak, lying in his mother's lap, scarcely able to speak, though complaining somewhat of his head. There was thirst, loss of appetite, coated and rather dry tongue, but no costiveness. On a review of the whole symptoms, and being impressed by the recollection of an epidemic then prevalent in the locality, I came to the conclusion that the child was suffering from chronic remittent fever of a low

type. Still, I was not quite satisfied with the diagnosis, as there appeared something not easily to be described in the case, different from the patients I was then attending. The epidemic then prevalent absolutely demanded bark and ammonia for its satisfactory treatment, and these agents were here given. Under their employment, a great change for the better appeared to ensue, and progressed for an entire week. I watched the case with much interest, being suspicious about my diagnosis, but at the end of the week I entered in my note-book that I thought my patient would do well, and that "my diagnosis is right." The next day a change appeared. The patient became worse, and complained bitterly of his head. There was no costiveness, rather the reverse, but there was some vomiting. The ammonia and bark were stopped, leeches applied to the temples, and blisters behind the ears, antimonials, salines, &c., given. No relief from any treatment was obtained, the child became still worse, semi-conscious, the pupils were dilated, the head thrown back, and the limbs became slightly stiffened. With slight alternations, these symptoms continued for four days, when the limbs became more relaxed, and every now and then affected with a sort of slow shaking or trembling movement. The remission called the "lightening before death" appeared, then, as was expected, the symptoms became worse, the limbs stiffer, the head thrown back, the hands clenched, and the patient died at the end of the second week since he was first seen at the infirmary.

The case had been very obscure to us; there had been no definite convulsions, no screaming, no "cerebral respiration," though the latter was frequent, no constipation, and but little vomiting. The constant dorsal decubitus, the peculiar opisthotonic symptoms, and the pyrexial prodromi were the more marked positive phenomena—of course the lesion was cerebral, but that was saying little; there was probably effusion, that was not saying much more. It might be the base, or the hemispheres, or the ventricles, which were more particularly involved, or it might be the meninges alone which were affected, or they might be intact, and true tubercle exist of the cerebellum medulla, or brain proper. Farther, the inflammatory element, if present, might be either of the simple or granular character, the fever might be symptomatic of the cerebral mischief, or reactional, or be the primary disorder, and the affection of the nervous centre be secondary to it.

P. M.—Skull well ossified, convolutions of brain close-pressed, the membranes intensely congested. No milky effusion along the course of the vessels, no exudation of any kind beneath the arachnoid or upon the hemispheres. No granules along the edges of the latter. Cerebral matter showing numerous red points and striæ on section, but no continuous blush. Ventricles greatly dilated, extending the whole length of the hemispheres, and full of serum. In each posterior cornu floated a thick continuous flock or flake of green-coloured purulent matter. The ventricular lining membrane was thickened and vascular in parts, and rough and broken down elsewhere. No central softening existed. A small quantity of green purulent matter was found at the base. The cerebellum was rather softer than natural. No tubercular deposit existed within the cranium, nor within the thorax.

The absence of the ordinary characters of simple hemispheric acute meningitis, of those of the tuberculous meningeal affection, the slight evidence, comparatively, of lesion at the base, and the very positive signs of the ventricular changes, together with the peculiar symptoms, authorize me, I believe, in considering the above case as one of simple acute ventricular meningitis.

Abscess of Brain—Disease of the Ear. By W. HUGHES WILLSHIRE, M.D.—Disease of the central organs of the nervous system, from more primitive mischief going on in the bony structures adjacent, is of no unfrequent occurrence. This connexion between scrofulous disease of the internal ear and the

destruction of the brain, is occasionally illustrated by such an example as the following:—J. F., a boy eleven years of age, and living at Southwark, came under my care in the month of July, 1852. His mother stated that, three weeks before, he went into the country, but returned home ill. He then “had some fits,” and soon began to complain of his head. A discharge of matter which had been wont to flow from both ears now stopped, and the pain of the head then became so intense that the boy screamed out from the agony. He then had another fit, and I was now requested to see him. On cross-examination, it appeared that, when two years of age, he had “brain fever,” then “inflammation of the ears,” and discharge from them, which had troubled him very severely off and on until now. He was of a very scrofulous family. He was quite conscious, lying with his hand placed against the right side of his head, complaining of the pain there. The tongue was coated, the bowels not costive, and there was some fever. Leeches were applied to the temples, blisters behind the ears, and afterwards poultices to the latter organs. Purgatives and full doses of nitre were also given. For four or five days great improvement seemed to follow; so much so, that I began to think the cerebral disturbance had no intimate connexion with the disease of the organs of audition. Suddenly, the patient became worse. I found him moaning from the severity of the pain, and sorely complaining of his head. In answer to my inquiries, I was informed that he had squinted, and “made mouths and strange faces.” He constantly cried out for some one to press his head hard; consequently, his mother or some relatives sat at his bed-side for hours together, pressing with their hands upon his head. In this state he remained for two days, not unconscious, but in what might be called rather a stupid condition, and evidently suffering intense pain in the head. Convulsions supervened, and death followed ten days after he began last to complain of the cerebral symptoms. On examination of the body, a large abscess was found in the left cerebral hemisphere, communicating with the ventricle, and filled with green fetid pus. On the other side, its walls approached at one point just close enough to touch the cranial bone connected with the left ear. The bones of the latter were diseased; but not to the extent of causing a communication between the external meatus and the interior of the cranium. Such, however, would apparently soon have occurred, as the bone was becoming carious at the point where, when we were removing the brain, the abscess burst, emitting much of its horribly fetid contents. The rest of the brain generally was anæmic; but the vessels of the meninges were greatly congested. Unfortunately, the exact character of the walls of the abscess was not carefully noted down at the time; but from recollection it is believed it was of a thin cystic description. In this case, it may be asked, how long the abscess had been forming, and why it was the pain so sorely complained of was felt on the right side, whilst the collection of purulent matter existed on the left.—*Ibid.*

Prognosis and Treatment of Epilepsy.—The *Union Médicale* for May 17th and 19th, contains an article by Dr. HERPIN, of Geneva, on the above subject, of which we now give an abstract.

In the *Union Médicale* for December 1, 2, and 7, 1852, M. Moreau, of Tours, relates nine cases of epilepsy, in which oxide of zinc had failed to arrest the disease, a remedy stated by Dr. Herpin to be of considerable efficacy. Seven of the cases were of the class stated by Dr. Herpin to be most amenable to treatment, and the medicine was administered according to the rules laid down by him in his essay, “Du Prognostic et du Traitement curatif de l’Epilepsie,” published last year at Paris. Dr. Herpin points out the causes of M. Moreau’s want of success, in the following manner:—

1. The first remarkable point, which may account in a great measure for the different results obtained by M. Moreau and Dr. Herpin, was, that eight of M. Moreau’s cases were hospital patients, while Dr. Herpin’s were private

patients. Dr. Herpin observes, that physicians who have the charge of epileptic wards in hospitals regard the disease as almost always incurable; while those who see the patients at home, as far as can be judged from their writings, form a very different prognosis. Tissot, Odier, De la Rive, and C. Vieusseux, all believe in the curability of a fair proportion of epileptic cases. A principal cause of the difference between the opinions of the two classes of practitioners is, that those in private practice generally see the disease from its commencement, while hospital physicians almost always have to treat severe or obstinate cases.

2. M. Moreau had only male patients; Dr. Herpin had more females than males. From an analysis of his cases, Dr. Herpin arrives at the following results:—

Of twenty-six female epileptic patients, sixteen were cured, six were improved, and four were incurable.

Of twenty-four male epileptic patients, twelve were cured, four were improved, and eight were incurable.

There were thus twice as many incurable cases among males as among females.

3. With regard to age, Dr. Herpin has obtained the following results:—

Of thirty-five patients under 20 years, eighteen were cured, nine improved, and eight were incurable.

Of nine patients aged from 20 to 50, five were cured, one was improved, and three were incurable.

Of six patients aged from 50 to 80, five were cured, and one was incurable.

The period of life from 30 to 50 furnishes a third of incurable cases; while the other two do not together supply a fourth. All M. Moreau's cases were from 19 to 50 years of age, the most unfavourable period.

4. With regard to the previous duration of the disease, Dr. Herpin finds that—

Of twenty-three cases, which had existed less than a year, fifteen were cured, five were improved, and three were incurable.

Of twenty-seven cases from one to twenty years' duration, thirteen were cured, five were improved, and nine were incurable.

While nearly one-half of Dr. Herpin's cases were of less than a year's duration, three of M. Moreau's patients had been ill from fourteen to twenty months, one for two years at least, three for six years, and one for about twenty years; the ninth had recent attacks of vertigo, but had probably had an epileptic attack six months before.

5. With regard to the number of attacks previous to treatment:—

Thirty epileptic patients, who had had less than twelve attacks, furnished only three incurable cases.

Twenty-two patients who had had at least from thirty to a hundred attacks, furnished twelve completely obstinate cases, being at least five times as many as in the preceding category.

Of M. Moreau's nine cases, one, who was seized with vertigo, had perhaps had a fit; one patient had had only four attacks; one had had about fifty; four from seventy to eighty; one more than a hundred, and one more than five hundred. Besides this, one of the patients had, before the commencement of treatment, paralysis, denoting organic lesion of the brain, which was proved by the autopsy; and another had been twice insane. This latter circumstance was met with in one of Dr. Herpin's cases, in whom, though the conditions for treatment were otherwise favourable, the disease remained incurable.

Besides these causes of failure in M. Moreau's cases, Dr Herpin points out that the want of sufficient judgment in the choice of treatment is perhaps a more powerful obstacle. He observes that as long as we are unacquainted

with the indications of each remedy for epilepsy, we must begin by giving that which experience has shown to have succeeded in the greatest number of cases; then, in case of failure, we must have recourse in succession to other remedies of efficacy. By employing only one, especially in a number of patients placed in the same conditions as to age, sex, &c., we render ourselves liable to fall on the medicine which is not indicated. This is precisely what, it seems, has accidentally happened to M. Moreau.

Oxide of zinc is believed by Dr. Herpin to fail generally in epileptic patients in the vigour of their age, especially in men. Taking the whole of the cases placed in favourable conditions as regarded the number of previous attacks, and which were treated by oxide of zinc, he finds that there were twenty-six cures and five failures—all the latter being in patients between the ages of seventeen and fifty-nine years. On examining into the results of the treatment by oxide of zinc in men of between twenty and fifty years, in order that the conditions of sex and age might be the same as in M. Moreau's patients, Dr. Herpin finds six patients who were almost all in the most favourable conditions for treatment. In one, venesection appeared to have more influence than the zinc, in producing improvement. Of the remaining five cases, there were—one cure without relapse, in a patient who had had only three attacks; two cures followed by relapse—in one of these the oxide of zinc failed on the subsequent trial; one in whom improvement was produced at the age of fifteen, but in whom the same remedy failed ten years later; and lastly, one in whom the disease altogether resisted treatment, although it had been commenced five days after the first attack. Thus, while the total number of favourable cases treated by zinc are in the proportion of five to six, adults furnish only three cases out of five, and in only one of these was the cure permanent.

In adult age, it is necessary to give zinc in large doses and for a considerable time; in childhood and old age, the same result is obtained from smaller doses, and, in some cases, from almost insignificant quantities.

The preceding observations appear to Dr. Herpin to afford sufficient reason for arriving at the following conclusions:—

1. Oxide of zinc seems to be indicated as an anti-epileptic in children and old persons.
2. It often fails in persons of middle age, especially in men.
3. If it be employed in females, it must be given in large doses and for a long time.

Whatever, Dr. Herpin observes, may be the remedies employed, it is of the highest importance that the disease be treated at as early a period as possible. He is convinced that, by perseveringly treating epilepsy from its earliest manifestation, there is a certainty of cure in a large majority of cases. At present, some mistake the first symptoms of the disease; others treat it for a time by means almost always inefficacious, such as bleeding, anthelmintics, &c.; others again try useful remedies, but timidly, and without effect. A small number, chiefly hospital physicians, form a tolerably accurate notion of the choice of a medicine and of the results obtained; but they are placed in the worst conditions for acting at the most favourable moment.

Dr. Herpin promises, at a future period, to publish in the *Union Médicale* the details of some cases in the private practice of himself and others, giving both the successful and the unsuccessful cases in the proportions in which they have been met with.

HEIGHAM HALL LUNATIC ASYLUM, NORWICH.

It is so seldom that the public mind is ill directed or unfairly prejudiced by the public press, or that the latter appears to lend its aid to attack the innocent or minister to vindictive and personal feelings, that whenever such an event does occur, the attention of thinking and unprejudiced men is arrested, and the mind seeks some explanation of such an apparent anomaly.

There are few subjects which have of late occupied earnest and philanthropic minds more than the management of asylums for the insane, and the treatment of their inmates; nor is there any more vexed question than the boundary which separates soundness of mind from insanity.

The very fact of mental disease requiring peculiar treatment, and that for obvious reasons such treatment is at all times attended with a certain amount of secrecy, and that the interior of a private asylum should be as private as its name designates, gives rise in the minds of the public to a certain feeling of curiosity, not unattended by doubt and suspicion. Hence any apparent departure from the laws which govern such institutions is watched with jealous scrutiny. The antecedents of private asylums before the appointment of Commissioners in Lunacy are not of the most favourable kind; while the supervision of that body has not been long enough established, nor their peculiar functions sufficiently understood by the public, to give them the assurance that the misrule of former days is now practically impossible. Hence it is, we believe, that a whisper of mismanagement in any public or private asylum is eagerly listened to; and minds already prepared for startling disclosures seize with avidity upon the first intimation of illegal practices, and at once draw the conclusion that heinous offences can be and still are perpetrated and sheltered under the existing laws of lunacy.

Time alone can give a different bias to public opinion upon this subject; and it is not until the public mind is satisfied that, by the machinery of the lunacy laws, a watchful eye is ever kept on the conduct of asylums, and that misdeeds are inevitably detected and as surely punished, that mistrust of such establishments will be removed.

We have been led to make the above remarks by the report of a recent case which has excited no little public interest, and not less public scandal—a case which, if the facts are as represented by the public statements, should for ever deprive the parties accused of all public confidence; and it is not without much pain, seeing that gentlemen of high and rising repute in their profession are implicated as to character and reputation, that we commence the investigation of this case. There is in the city of Norwich a private lunatic asylum, known as Heigham Hall, which for more than twenty years has been conducted with repute by its proprietors. Its position was so good that during the past year Dr. Ranking, a gentleman well and most favourably known in medical literature, as well as highly esteemed in his immediate neighbourhood, was induced to become a co-proprietor with Messrs. Nichols and Watson, the original proprietors. Immediately after this union reports were circulated by Dr. Hull, that, *two years* before, Mr. Nichols had solicited him to become a party to a breach of the law. Now, it is not our intention to discuss the private squabbles of Mr. Nichols or Dr. Hull, or entertain the question of the motives of the one or the credibility of the other. We have a higher and more serious object in view. We desire to enter dispassionately into the inquiry—seeking the truth, and awarding an unprejudiced judgment. The allegations against Messrs. Nichols and Watson may be considered under three heads:—

Firstly. That they, in June, 1852, received into their house a person guilty

of an offence, of whose insanity there was doubt, and by such reception rescued him from the probable consequences of his crime.

Secondly. That upon his discharge he was appointed chaplain to the asylum.

Thirdly. That after the visiting justices, in June, 1854, made the discovery that, in their opinion, he was not a proper person to have been appointed, or continue to officiate, as chaplain, he was, in contravention of the Lunacy Act, retained in the house as a boarder. These, apart from a vast deal of personal and extraneous matter, constitute the gravamen of the charges against the proprietors.

Let us now investigate the first, and by far the most serious charge:—Was Mr. Holmes (the patient) sane or insane?—and was he protected, by the admission to the asylum, from the operations of the law?

It appears that his family, on a previous occasion, entertained doubts as to his sanity, and, at that time, Mr. Nichols had an opportunity of adding a patient to his establishment, but declined, because, in his opinion, the *evidence of insanity was insufficient*, a line of conduct not in accordance with the charges recently brought against him: being again consulted, he deemed him of unsound mind, and advised his confinement; and, in this opinion, he appears supported by the testimony of all the parties concerned in the transaction, as is apparent from the statements of the rector of the parish, the magistrate who was applied to, the policeman who investigated the charge, the mother of the girl upon whom the assault was committed, her aunt, Mr. Holmes' housekeeper, and her husband, who all came to the same conclusion, that he was not and had not been for some time in his right mind before his removal to the asylum. On the other hand, a Mr. Mills, who had been requested to examine Mr. H——, could not discover any symptoms of insanity (he does not say that he was of sound mind), and upon this point much stress has been laid. With us it has but little importance; for it must be considered that Mr. Mills saw the patient but *once*; now there are many cases in which a single interview is sufficient to detect unsoundness, but it not unfrequently occurs that several examinations are required before the experienced and practical psychologist can venture to pronounce upon the existence of insanity, and we cannot help thinking that the evidence of those in daily intercourse with Mr. Holmes is more than sufficient to counterbalance the negative opinion of Mr. Mills. It is stated, upon credible testimony, that this unfortunate gentleman expressed to the Rev. Mr. Andrew that it was his desire to be placed in the Norwich Castle, as that would do him good. The husband of this housekeeper states, that he had, on many occasions, to hold him down on the floor as a protection from his violence; and the general evidence of other parties is to the effect that his demeanour was that of a lunatic. The Rev. Mr. Cobb says, that, "during his sojourn at Wymondham, he became less and less responsible for his actions." In the face of such an amount of testimony, can we draw any other conclusion than that the mind of Mr. Holmes was upset; the contrary would be to suppose that a vast conspiracy existed to establish a fact which no one beyond Mr. Nichols had any interest in making apparent. The fact that the accused have again and again made efforts to be put upon their defence, should have its due consideration; at present they appear, owing to feelings adverted to in the earlier portion of this article, to have been unfairly assailed, and condemned unheard. The charge that Mr. Holmes was rescued from the gripe of the law involves a simple absurdity, as any one acquainted with English law must know; his admission to the asylum in no way protected him, but rather secured his person until the ministers of the law had prepared to seize him: had such a course been adopted, Mr. Nichols would have found to his cost that any opposition would have been followed by fatal consequences to his asylum. We cannot help thinking that some undercurrent prejudicial to the interests of the asylum exists, since, even after the

expressed opinion of the Commissioners in Lunacy that the Rev. E. Holmes was insane when admitted to Heigham Hall Asylum, the public mind is disturbed by frequent returns to the subject. Our space prevents our entering more than generally upon the other and more insignificant charges. The propriety of the appointment as chaplain is a matter of opinion only; there was nothing morally or legally wrong in such appointment, nor can we see that a lunatic restored to reason should be held responsible, and punished for acts committed while of unsound mind, or precluded from a return to the duties of his profession.

The breach of the Lunacy Act, upon which the Recorder of Norwich made, we think, much too severe remarks, appears to us no breach at all. Mr. Holmes was suspended from his office by the proprietors; they were anxious (and diligently sought) for further investigation into the charges against them. During this time Mr. Holmes, as was most natural, remained, with the knowledge of all parties, in the house, which he at once left when the Commissioners found themselves unable to sanction his residence as boarder. The published correspondence of the Commissioners upon this point must disarm all feeling of prejudice. We have now a more pleasing duty to discharge towards the proprietors of Heigham Hall Asylum. We observe that an active magistrate, Mr. Guttren, speaks of the management of the asylum in terms of unqualified praise, an occurrence studiously overlooked in the various articles which have appeared to the prejudice of the proprietary. We are unable to account, upon reasonable grounds, for this omission. We, however, must congratulate Messrs. Nichols, Ranking, and Watson, upon having obtained, at such a time, so unqualified a commendation of their management. Let them but persevere in such a course, and we hesitate not to say they will outlive the attacks of the evil-disposed, or the attempts of unsuccessful rivals to injure an establishment which now, the first time for twenty years, has had a breath of scandal wafted against its walls.

HOSPITALS FOR THE INTEMPERATE.

In one of the early numbers of the *Psychological Journal*, when alluding to the increased prevalence of *Oinomania* the insanity exhibiting itself in a morbidly uncontrollable desire for stimulants; we made, after suggesting the establishment of hospitals for the intemperate, the subjoined remarks:—

“We should like to see this important subject taken up by judicious persons, and much of the fallacy, error, and prejudice in association with it, dispelled. Alas! how many hundreds are annually sacrificed at the shrine of intemperance, whose lives might have been spared had efficient means been resorted to at an early period, before the habit became fixed and confirmed. That there is a disease of the mind manifested solely in an uncontrollable desire for stimulating drinks, we have not a doubt; the more we see of the insane, the stronger is this conviction fastened on our minds. There is ordinary intoxication, and this may, to a certain extent, become a habit; but there is, apart from this, a form of insanity, exhibiting itself almost exclusively in a morbid yearning for intoxicating drinks. We have often seen cases of the kind, and as often have lamented our inability seriously to grapple with them until the disease has extended into positive delirium, and it is only at this stage that the law allows us to interpose.”

This suggestion, thrown out by ourselves many years back, has not yet been acted upon in this country. The more the pity. Our transatlantic “go-ahead” friends, who are ever on the alert to meet the pressing exigencies of the time, and are always prominent in every Christian and philanthropic undertaking, are

adopting active measures to establish an institution of the kind for the reception and treatment of persons addicted to uncontrollable habits of intemperance, under the designation of

"THE INEBRIATE ASYLUM."

We call the particular attention of our readers to the following remarks in reference to this noble project. We extract them from the *New York Tribune*, of December 1, 1854.

"We, the undersigned, appointed by the Legislature of the State of New York to organize an institution to be known as the 'United States Inebriate Asylum,' and to act as Commissioners to receive subscriptions to the capital stock of the said Asylum, do herewith submit to the public the following statement:—

"The object of this institution is to provide an asylum for the poor and destitute inebriate, where his physical and moral condition will be alike the care of the physician and the philanthropist, and where his labour may be rendered productive, and of service to his family.

"With the Asylum there will be connected workshops, in which each patient, as soon as his condition will permit, will be employed—thus making the Asylum a self-supporting institution.

"It will be seen that the community will thus be relieved of the burden of maintaining inebriates in alms-houses and prisons, who will be separated from the society of those incarcerated for public crimes, and placed where their inebriety will be treated as a *disease*, and where no efforts will be wanting to produce in them a reformation, and where an income from their labour will be secured to their families, who otherwise would be left to penury and suffering.

"To carry out successfully the great aim of the institution, 50,000 dollars must be raised—this being the amount of capital stock required by the charter. This amount (which can be increased when necessary) is divided into shares of 10 dollars each. Any person wishing to subscribe to the capital stock can send his name, with the amount he will take, to any one of the directors.

"We think it judicious to lease a building or buildings, until suitable edifices can be erected, for the purpose of entering at once, or as soon as practicable, upon the work for which the charter was granted. In accordance with a provision in the act of incorporation, there will be a report on the third Wednesday of January of each year, of the proceedings, expenditures, income, and condition of the Asylum, verified by the affidavit of the President and Treasurer, which report must be filed in the office of the Secretary of State.

"In regard to the necessity of an institution of this character, we cite no less an authority than Dr. Benjamin Rush.

"'To the account of physical remedies,' he says, 'I shall add one more—viz., the establishment of a hospital in every city and town in the United States, for the exclusive reception of hard drinkers. They are as much the objects of public humanity and charity as mad people. They are indeed more hurtful to society than most of the deranged patients of a common hospital would be if they were set at liberty.'

"We are happy in giving assurance that this enterprise meets with the approbation and encouragement of many of the most intelligent and philanthropic members of the community.

"The Directors put forth this brief statement of their object and plan of operations, with the expectation of meeting a quick and cordial response from the benevolent of this and other sections of the country. The call for sympathy and material aid in laying a permanent basis of an institution that promises much for the recovery and salvation of a large number of the human brotherhood, we are confident will not be unheeded.

"This institution is not designed to conflict with any other methods for saving the inebriate. There is nothing, we believe, similar to it in this or any other country.

"Thousands will look to it for help, and help they should and must have.

"That which was worth creating is worth preserving. The Benevolent Father puts it within our power to save those who are ready to perish. To rescue a fellow-being from physical and spiritual thralldom is worthy of the exercise of the highest talents and the purest love. To redeem from ruin is greater than to create. To turn from vice to purity, from darkness to light, from death to life; to make him possessed of a free, enlarged, and beautified existence, is a divine mission.

"Everywhere goes up the wail of wrecked humanity, of prostrate and suffering brothers; from every side comes the cry for help. They are the true workers who respond to this cry. They are enriched by giving, and blessed in blessing.

"Fellow-citizens, fathers, brothers, and sisters! give us your aid in this branch of beneficence, and the blessing of multitudes will be your reward."

This subject is ably handled in a recent report of the trustees, and of the Butler Hospital for the Insane (U.S. America), in which the form of insanity exhibiting itself in an involuntary and irresistible propensity to drink is fully and accurately described. The difficulties that beset the physician in the treatment of these cases are fairly represented by the writer:—On complying with certain (legal) conditions, we are authorized to hold in confinement persons who are insane; but no law of the land would justify us in depriving men of their liberty for any other cause, however commendable the object. Now, the class of persons in question, while in the paroxysm, or suffering under its immediate effects, may, in any proper sense of the term, be called insane, and so long we have an unquestionable right to hold them. When, however, this condition passes away, as it usually does within a few days or weeks, and the mind resumes its perfect consciousness, what are we to do? The person claims his liberty, while nobody doubts that he would use it only to advance another step in the road to bodily and mental ruin. Here seems to be a conflict of duties, and with every disposition to do right, I do not see how we can help compromising either the happiness of families or the rights of individuals. The friends are desirous of giving the person the benefit of the only measure which promises relief—a protracted abstinence from intoxicating drinks. The measure is prompted by kindness and duty, but nothing short of confinement will ensure its accomplishment, and they appeal to us to aid them in their laudable design with the means and appliances at our command. Prompted by similar motives, we consent to receive the person and give him the benefit of the peculiar discipline and management of a hospital for the insane. In most cases we encounter no opposition. The person may protest against the measure which deprives him of liberty, but he fails to obtain any support or countenance. The right of friends or guardians to subject him to any reasonable management which promises to restore his appetites and passions to a healthy condition, remains unquestioned, and we are as little disturbed by meddlesome interference as in any other class of cases. But it occasionally happens that the person invokes the aid of those who disregard altogether the moral aspects of the case, and we are threatened with the terrors of the law, for holding in confinement men who are neither insane nor guilty of crime. This is an embarrassing position. On the one hand we are prompted by a sense of right and duty to avoid all doubtful constructions of the law; on the other, our sympathies are excited by the agony of friends whose hearts have been torn by repeated outrages upon public order and the peace of the domestic circle; whose strongest efforts have been needed to avert painful exposures, if not the most disgraceful penalties of the law; and who dread the renewal of those

scenes in which every sentiment of delicacy, honour, propriety, and right seemed to have given place to a savage, grovelling fury. Whatever course we take—whether we shun collision with the law by yielding at once to its demands, or, strong in the rectitude of our intentions and objects, pursue the even tenor of our way and abide the consequences—we assume a responsibility which ought not, in justice, to be imposed upon us. It would seem, then, to be a very proper conclusion, that if we are expected to receive the class of persons in question, we must be invested with the requisite legal authority. Let the legislature enact that habitual drunkenness shall be subjected to all the disabilities of insanity, and then we may engage in a work of humanity without infringing upon the right of individuals.”

SUGGESTIONS FOR A NEW PSYCHOLOGICAL-TERMINOLOGY.

WE are glad to perceive that the “American Association of Medical Officers of Hospitals for the Insane” are taking this subject up in a proper spirit. It is time that all parties connected with the management of institutions for the special treatment of the insane should do their utmost to discountenance the use of terms based upon fallacies, gross, crude, obsolete, and exploded notions, and only calculated to create alarm in the minds of those suffering from brain disorders, and to prejudice and disgust the public against all personally connected with the confinement of the insane. The phrases, “madness,” “mad-house,” “lunatic,” “lunatic asylum,” “keepers,” “asylum,” “cell,” should be at once and for ever expunged from our vocabulary. The term “madness” is unquestionably an unscientific one; the word “lunatic” is obviously founded upon an acknowledged error; the appellation “keeper,” only suggests to the imagination wild beasts, iron cages, and certain officials who perambulate the Zoological Gardens, and should never escape the lips of humane and scientific men. In fact, it is our duty, recognising the importance of early treatment in cases of insanity, and the necessity, as a curative process, of removing the insane immediately from the excitement and morbid associations of home, to accompany that imperative step with the minimum degree of annoyance, both to the patients and their friends. A man in a state of insanity is not likely to be soothed by being informed that he is going to a “mad-house;” and we would humbly suggest, when there, that the irritation which is necessarily increased by his sudden removal from home, and being placed among strangers, is not likely to be much mitigated by telling him, that he is to be consigned to a “cell,” or that he has a “keeper” to watch his every movement, to sleep in the same room with him, and, if necessary, to control his actions.

We throw out these *hints* for the immediate consideration of all engaged in the management of this class of patients, intending in an early number to recur to the subject.

TO THE EDITOR OF THE JOURNAL OF PSYCHOLOGICAL MEDICINE.

MY DEAR SIR,—In the current number of your Journal (October, 1854) there is an article on Non-mechanical Restraint in the Treatment of the Insane, in which I am classified with those “Medical Superintendents of Asylums who do not use restraint, but who give no opinion on the abstract question.” Will you permit me to say that this is not the exact position I wish or ought to occupy, for I direct mechanical restraint (suitable to the case) to be used whenever, after a careful consideration of all the circumstances, it appears to me the

best for the patient. *Practically*, I think I differ little, if at all, from the great majority of medical superintendents in the *abstract* opinion; for seclusion, immersion in the cold bath, the cold shower bath, and various other methods used to secure a control of the actions of the insane are all based upon the principle of a *coercive* treatment being necessary in at least some cases, yet to be used as seldom as possible. In my reply to the queries of the Commissioners, I do not refer to those less direct methods of restraint, but only to the mechanical; and I remarked, "As to the use of persons or mechanical appliances, when physical force is absolutely necessary (and such cases must inevitably occur) my experience is in favour of the latter."

All the means and methods used to regulate the actions of the insane, whether they be simply medicinal, or mechanical, or moral (as seclusion, the cold douche, &c.), may be used with unnecessary frequency, harshness, or cruelty; the objections which apply to one, apply indeed to all. I, for one, therefore, should be glad to see a controversy terminated which has become useless for practical results, and appears not only to be degenerating into personalities, but to present a taint of empiricism. I am, my dear Sir, very truly yours,

York, 13th Nov. 1854.

J. LAYCOCK.

To Correspondents.

The parcel of books sent by Dr. Girolami, from Pesaro, we were obliged to refuse, in consequence of several pounds postage being demanded!

The excellent and well-written work on "Unsoundness of Mind in relation to Criminal Acts," by Dr. J. C. Bucknill, M.D., and the valuable Essay by Dr. J. W. Williams on "Unsoundness of Mind in its Medical and Legal considerations," published at length in the "Dublin Quarterly Journal of Medical Science," will be reviewed conjointly in our next number.

THE JOURNAL
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

APRIL 1, 1855.

ART. I.—OINOMANIA; OR, THE MENTAL PATHOLOGY
OF INTEMPERANCE.

IN our last Number we briefly referred to a noble effort now in progress in the United States of America to establish an "Inebriate Institution" for the reception and treatment of that form of insanity, or monomania manifesting itself principally in a morbidly uncontrollable propensity for alcoholic stimulants. We do not refer to drunkenness or intemperance in the popular signification of the terms, but to a *phase of disordered mind*, of *cerebral disease*, the prominent symptom being an irresistible yearning for intoxicating drinks. The experienced physician and pathologist may easily distinguish between ordinary habits of intemperance and "fits" of drunkenness and the form of insanity to which we allude. This mental disorder exists to a frightful extent in all classes of society, from the highest to the lowest grade, and is destructive, beyond all conception, to domestic happiness, to national prosperity, and to social and private morals. It is a form of alienation of mind which has, to a great degree, escaped medical and general observation, and may therefore be classed among the unrecognised phases of mental derangement. The subject, we admit, is a delicate and difficult one to grapple with, mainly in consequence of the prevailing fallacies existing in the public mind with respect to morbid affections of the intellect. This must not, however, deter us from breaking ground upon so important a matter.

There have been large contributions to the literature of drunkenness in England of late. Twenty years ago a numerous Committee of the House of Commons collected a vast mass of information on the subject by special inquiry.* Dr. Carpenter has recently published a

* "Report of an Inquiry into Drunkenness," ordered by the House of Commons to be printed, 5 August, 1834.

valuable essay on the subject,* and we have just received an eloquent and well-written work on the Pathology of Drunkenness, from the pen of an intelligent Scotch physician.† To these, other names of English authors might be added. Very able writers in Germany, Sweden, Denmark, &c., have also added largely to our knowledge. Amongst these may be mentioned Friedreich, Brühl-Cramer, Barkhausen, Most, Heinroth, Lippich, Rösch, Huss, &c. Twenty years of uninterrupted inquiry, and an experience of the affection most widely extended, must be considered sufficient for a thorough elucidation of its general pathology and therapeutics.

Polydipsia ebriosa, or drinking to drunkenness, shows itself in various ways. First in order comes the habitual sot—the man or woman who drinks from early morn to dewy eve, and who is either always drunken, or more deeply drunken, either at night or twice in each day. This, for practical purposes, may be termed *continuous* drunkenness. Next is the *intermittent* form, in which there are two or three days of continuous drunkenness, then two or three days of entire or partial abstinence from alcoholic drinks. This is seen most typically in mechanics of drunken habits, who drink from Saturday night to Monday night or Tuesday morning, and then, going to their usual employments, continue sober for the rest of the week. This intermittent drunkenness is, for the most part, unconnected with any morbid changes in the nervous system; and in this essential respect it differs from continuous drunkenness, and from an intermittent form, which recurring at much longer intervals may be termed *paroxysmal* drunkenness. Writers mention other forms, but they do not present points of difference sufficiently important for recognition as distinct from the preceding, being, in fact, those forms in varying degrees of intensity, or commingled, or else instances complicated with other diseases of the nervous system.

Polydipsia ebriosa, we hardly need say, is not necessarily insanity, for the “thirsty soul” may usually be rendered amenable to those motives which regulate the conduct of rational or sane men. That drunkenness can only be designated insane (*Polydipsia ebriosa insana*, *Dipsomania*, *Oinomania*) which is induced by the action of an impulsive desire for stimulant drinks, uncontrollable by any motives that can be addressed to the understanding or conscience: in which self-interest, self-esteem, friendship, love, religion, are appealed to in vain; in which the passion for stimulant drinks is the master-passion, and subdues to

* “On the Use and Abuse of Alcoholic Liquors in Health and Disease.” Prize Essay. By William B. Carpenter, M.D., F.R.S., &c. 1850.

† “The Pathology of Drunkenness: a View of the Operation of Ardent Spirits in the Production of Disease.” By Charles Wilson, M.D. 1855.

itself every other desire and faculty of the soul. We say stimulant drinks, for we speak of intoxication in the ordinary sense of the word; but, in truth, the mania has a wider range of victims than the drunkard, and includes all those who indulge uncontrollably in narcotic and stimulating drugs, as the drunkard indulges in alcoholic drinks. The confirmed *opium-eater* is, therefore, virtually, although not etymologically, in the same category as the oinomaniac; for he is equally the slave to his insane appetite. A word is yet to be invented which shall designate correctly the form of mental aberration to which we refer. We will not venture the attempt, but will simply define it to be an insane appetite for those agents which received into the blood develop the pleasurable feelings of mental or corporeal well-being—a state of contentment, ease of mind or of body, attributed, in popular language, to “the spirits”—so as to *raise* “the spirits,” and induce satisfaction, happiness, and cheerfulness, or else antagonize the opposite condition to this feeling of mental or physical well-being, and so counteract unhappiness, “lowness of spirits,” or depression of the vital and mental powers.

The circumstances under which nervine stimulants are taken are very various and widely different. The most general excitant of the appetite is that condition of the mind in which there is simply a desire for pleasurable excitement and little power of will to resist the temptation to gratify the desire. Persons of this class are numerous in the world. They have hereditarily a large capacity for physical enjoyment, conjoined with feeble intellect or judgment, or, if not feeble, are highly susceptible to all painful and pleasurable impressions, and *are often the offspring of persons who have indulged in stimulants, or who have weakened the cerebral organization by vicious habits and undue mental labour.* Not unfrequently there is a hereditary tendency in the family to hysteria, convulsive affections, eccentricity of character, oinomania, suicide; perhaps, in one branch or member, great talent; in another, a weakness of mind amounting almost to imbecility. The immediate result of the action of alcohol upon the system of a person in health is a more vigorous and agreeable discharge of all the vital functions. The blood courses more rapidly through the bloodvessels; the voice is more sonorous; the eye more bright; the muscular system braced up. But it is the nervous system which responds most readily to the stimulus. The intellect is clearer, the imagination more vivid, the memory more distinct, the thoughts more definite; in short, all the faculties are exalted. As to the emotions—joy, exhilaration, and good-fellowship are the principal results: as to the appetites, an increased development. If the stimulus be taken in larger quantity so as to act as a poison—*i.e.*, to *derange* the functions—morbid phenomena in connexion

with the encephalic centres are induced. The individual, perhaps, manifests more clearly his natural infirmities of character. The irritable and ill-tempered become quarrelsome; the silly, good-natured, and the foolish are officiously urgent in offers of kindness, laugh wildly and are tickled by trifles; and the melancholic become maudlin sentimental. Sometimes an individual passes through successive phases of mental change—as thus: at the first half-bottle of wine he is energetic, dignified, and decided, and his conversation is of affairs of moment. At the second he is mirthful, and indulges in the song and the jest. His motto is “*dulce est desipere in loco.*” At the third he is emotional and sentimental, easily moved to tears, and becomes, perhaps, amorous, or religious, as individual circumstances may determine. At the fourth, he is quarrelsome and incoherent; at the fifth, the cerebellum is manifestly more deeply involved, for he has now lost the power of co-ordinating the muscular system, so that he totters and staggers, or else is affected with *motus vertiginosi*—reeling movements—of various kinds. At the sixth, total abolition of consciousness supervenes, and that condition is attained in which the sot is said to be “dead-drunk.”

Now, strange as it may appear, this last is the condition desired by many drunkards; it is the summum bonum of their mental and physical existence. Smollett tells us that, in 1742, when distilled liquors were very cheap (being free from duty), the retail dealers put up boards inviting people to be drunk for the small charge of one penny, and dead-drunk for two-pence, with straw free to lie on. Cellars and places strewn with straw were actually provided for these devotees of Lethe. It is to this grovelling felicity that the habitual drunkard usually comes at last, however intellectual, witty, and gay he may have been, when he first began his career.

It is obvious, however, that the stimulant will be taken in quantities and at times in accordance with the corporeal and mental characteristics of the individual. With the educated, wine is drunk to make glad the heart and to invigorate the social feelings. To these results the lyrical poetry of the wine-cup invariably points. Anacreon expressly repudiates the corporeal delights and bestial excesses of the savage; he mingled water, like the ancient Greeks in general, with his wine.

“No! banish from our board to-night
The revelries of rude delight;
To Scythians leave these wild excesses,
Ours be the joy that soothes and blesses!
And while the temperate bowl we wreathe,
In concert let our voices breathe,
Beguiling every hour along
With harmony of soul and song.”

To antagonize depressing passions, as well as to exhilarate, is often the end of conviviality. Care and anxiety, grief and sorrow, depress the action of the heart, and if they do not make it literally ache, they are often accompanied by a tendency to sigh and a feeling of sinking in the epigastric region. The stimulus of wine has been from time immemorial appreciated as the most ready and effectual antidote to these depressing emotions and sensations.

“Behold! my boys a goblet bear,
Whose sparkling foam lights up the air;
Where are now the tear, the sigh?
To the winds they fly, they fly!
Grasp the bowl; in nectar sinking,
Man of sorrow, drown thy thinking!”

A great proportion of persons who take stimulant agents suffer from an indescribably painful feeling of languor and corporeal illness, which a stimulus is found to remove. This feeling is intolerable to those who, like the English opium-eater, “hanker too much after a state of happiness,” or who “cannot face misery with an eye of sufficient firmness,” so that the desire to relieve it becomes uncontrollable. Amongst the causes of these sensations may be mentioned those nervous affections which more particularly have their seat in that part of the nervous system which is the seat of the feeling of well-being, and which ministering to the functions of viscera in important relation to life, involve, therefore, the instincts for life and well-being. Certain diseases of the heart, impeding its functional activity or rendering its action painful, induce this depressed condition. Morbid states of the stomach and bowels, either inflammatory or irritative, in which digestion is accompanied by pain and a distressing sensation of weakness in the epigastrium, are amongst the most frequent causes of habitual drunkenness and opium-eating. Of these, chronic gastritis or enteritis are perhaps the most common. To some such state the English opium-eater refers when he asserts that when he first took opium, it was to mitigate a most painful affection of the stomach that occurred under unfavourable circumstances, from depression of spirits, and yielded to no other remedies. The same writer observes that the Dean of ——— and a late under-secretary of state, both used the same words to describe the sensation which induced them first to become opium-eaters,—viz., “that he felt as though rats were gnawing and abrading the coats of the stomach.” Hepatic or splenic derangement constitutes another not unfrequent and well-known source of this intolerable *mal-aise*. Equally frequent, but less recognised, is a chronic inflammation or irritation of the mucous membrane of the large intestine, resembling that which attacks the stomach, and, like that, deeply influencing the consciousness as to pleasure and pain. Morbid states of the

blood are also amongst the causes of the physical depression, especially those induced by an imperfect supply of oxygen (as when a vitiated atmosphere is habitually breathed), by an imperfect supply of proper nutrient materials, or by the retention of excreta, as the biliary, urinary, &c. Or the morbid condition, on which the distressing feelings depend, may be a change primarily in those ganglionic centres we have referred to, embedded in the cerebral mass, and are certainly in relation with the whole *sympathetic system* of nerves, however imperfectly their anatomy may be known to the anatomist and physiologist. Such a morbid condition may be classed with the true neuralgiæ or nerve-aches, inasmuch as the causes which induce the latter are continually the causes of the former. Perhaps the most common of all is the excessive use or stimulation of any portion of the nervous system.

It is a law of the organism that after a period of action there shall be a period of rest,—after excitement, comes repose. If the latter fail to be induced, pain and morbid action result. The excitement and increased action induced by vinous or narcotic stimulants, is not an exception to the law. On the contrary, the need for repose is strongly expressed by the organism in the general feeling of languor and depression which succeeds to the excitement, so soon as the stimulant effects of the agent have passed off. This feeling does not, however, precede the tranquil rest and refreshing slumber that commonly follow upon labour honestly and temperately pursued; nor is the rest sweet, as in the latter case Nature provides it shall be.

The depression which is felt treacherously points the sufferer to the cause as the remedy for the feeling, and since it effectually answers the purpose—at least temporarily—the thoughtless and imprudent do not hesitate to take it. They have now, indeed, a double inducement to drink,—firstly, to dispel “the blues;” secondly, to secure pleasurable excitement. In this way a poison is taken from day to day, and the man becomes at last the subject of the *maniacal* vice of continuous drunkenness. He has, finally, induced cerebral disease, from the consequences of which he can hardly escape with all appliances and means in his favour that art can afford.

Let us now trace the *pathological* influence of alcohol on the brain, from its first beginnings to the fatal close in mania, general paralysis, or death.

We have already cursorily described the ordinary phenomenon of a fit of drunkenness. The principal characteristic is, that the power of the will over the current of thought and over the actions is weakened, and weakened for the most part, *pari passu*, with the amount of stimulant taken. Now, as this is the principal characteristic of mania, it may be stated that during a fit of drunkenness, the individual is in

a condition *quasi* his cerebrum, analogous to that of the insane person. The action of alcohol is therefore concentrated on the brain. As to the different parts of the brain implicated and disordered, it would appear that they are affected from above downwards. Firstly, the cerebral hemispheres, as the seat of intellect and imagination, manifest the action of the poison, next the emotional centres are excited, then the more animal passions are roused, the motor and sensorial centres are next disordered, and finally the sympathetic system. Dr. Carpenter thinks that the specific exciting effect of alcohol upon the nervous centres can only be accounted for by the theory of some special relation between it and nervous matter. And this idea is fully borne out, he thinks, by the results of the experimental researches instituted by Dr. Percy, who found alcohol in the substance of the brains of dogs poisoned by it, in a proportion considerably greater than in an equivalent quantity of blood. In short, Dr. Carpenter argues that the cerebral substance manifests an elective affinity for alcohol in the blood: "the alcohol being thus specially drawn out of the circulating current by the nervous matter, and incorporated with its substance, in such a manner as even to change (when in sufficient amount) its physical as well as chemical properties." Its action is thus described by Dr. Carpenter:—

"The selective power of alcohol appears to lead it in the first instance to attack the cerebrum, the intellectual powers being affected before any disorder of sensation or motion manifests itself; and to this it seems to be limited in what has been here described as the first stage of intoxication. But with the more complete perversion of the intellectual powers which characterises the *second* stage, we have also a disturbed function of the *sensory ganglia*, upon which the cerebral hemispheres are superposed; this disturbance being indicated by the disorders of sensation, and also by the want of that control over the muscular movements which require sensation for their guidance. In the *third* stage, the functions of the cerebrum and sensory ganglia appear to be completely suspended, and those of the *medulla oblongata* and *spinal cord* now begin to be affected, as we see to be indicated by the difficulty of respiration, the strabismus, the dilated pupil, and the tetanic spasms."

There is considerable difference, however, in the temporary insanity and the other phenomena of morbid cerebral action induced by alcohol. It is certain that in some persons the influence on the motor system is much more manifest than on the sensorial, for in the class of cases to which we refer, while the individual sits still, he but slightly betrays his devotion to the glass, and it is only when he attempts locomotion that it is discovered he is too drunk to walk. This and other special states are referred to by Dr. Wilson.

"Sometimes a kind of reverie occupies the transition stage between

that of excitement and complete intoxication, and the individual remains for a while in a state of simpering quiescence. With another, one solitary idea, generally some real or fancied subject of offence, seems to lay hold of all that is left of the intelligence, and he mutters his resentment with stolid perseverance. In some, the drunkenness sets in suddenly, after the drinking has been continued for a time previously without any marked indication of its effects; while in a few examples, the power of locomotion seems to be implicated to a greater extent than that of the intelligence, and the drunkard loses the faculty of rendering his movements co-ordinate, and reels and staggers in his gait, though he still retains an entire consciousness of his condition. Or there may be the contrary of this, which is not of unfrequent occurrence, where the staring, vacant eye, and the expressionless features, with the inarticulate speech, surprise one in an individual who can still walk with almost perfect steadiness, though with a peculiar air of indecision in his movements. In such instances, which, in common with most observers, I have repeatedly had occasion to remark, there are physiological grounds for believing that, in the first description, it is the cerebellum, or smaller division of the brain, which is chiefly affected; and in the latter, the cerebrum, or larger division."

Doubtless individuals differ widely as to the relative vigour of the various divisions of the nervous centres, and as to their susceptibility to assume a morbid condition on the application of morbid agents; a difference to which may be obviously attributed the variety in the phenomena of intoxication by alcohol. The congenital condition of the nervous system, the education and employments, and the addiction to other vices, as gluttony, debauchery, &c., are causes of fundamental differences. The length of period during which the brain has been subjected to the action of the poison, must exercise an important influence. It may be stated, in general terms, that the phenomena of intoxication are as varied as those of mental derangement.

We may with propriety here revert to another point in the natural history of drunkenness, namely, the dangerous adulteration of spirits and intoxicating liquors.* Poisonous ingredients may be added either wilfully or accidentally. In England, common malt liquors are rendered stronger, that is, more intoxicating, by the addition of *cocculus Indicus*. In countries where spirits are distilled from potatoes and the cereals indiscriminately, it is probable that they are adulterated with some of the nervine-irritants and acro-narcotic poisons common to a large number of *fungi*. Dr. Huss is of opinion that the brandy distilled from diseased potatoes contains some new principle, termed by the Swedish distillers "brännnsnyta," which is not to be met with in spirit distilled from fresh potatoes or sound grain, and the operation of which is similar to that of alcohol. In Germany, a some-

* Vide Dr. Hassall's valuable work, recently published, "On Food, and its Adulterations." 1855.

what similar principle is obtained from distilled spirits, termed "fusel oil." The common *Lolium*, and the *Raphania raphanistrum*, (a weed growing in the corn-fields in Sweden and most parts of northern Europe,) are both poisonous. Linnæus, believing the latter to produce the kind of phenomena known as Ergotism, (that is, the results of poisoning by ergotted or spurred rye,) termed the disease *Raphania*. Amongst these phenomena are enumerated epilepsy, delirium, insanity, and idiocy. Although the police in Germany interfere to prevent the sale of spurred rye for food, they do not prevent its use in distilling, nor the use of the poisonous cereals we have noticed. In fact, any vegetable matter capable of the saccharine fermentation, is used by distillers in Germany and the north of Europe—spurred rye, mildewed grain, bad potatoes, husks of grapes, &c. Now, all these have a very close connexion with microscopic *fungi*; and hence the probability, that the known poisonous principles of these minute mushroom growths are held in solution in these foreign kinds of spirits, and may be the true source of the acrid stupifying properties which they especially possess. Further, the fusel-oil itself is not pure, but contains metallic oxides of known virulent action on the nervous system. One specimen the concrete oil, when examined, was found to contain 32·3 per cent. of these oxides, namely:—22·5 oxide of copper, 6·3 oxide of tin, and 3·5 oxide of lead! How much of the poisonous principle derived from the lolium, or from the ergot, or from the poisonous fungi that constitute the deadly vegetation of the distillers' refuse, enters into the hideous compounds which the drunkard swallows hourly, it is not practicable to determine, nor is it of importance to our subject. Certain it is, that poisons of this kind are taken with the inferior spirits.

The action of opium, hasaich, and other drugs upon the nervous system, taken for the same purposes as alcohol, differs considerably from that of the latter agent. As regards the mental powers, opium seems to act almost exclusively upon those portions of the cerebral hemispheres which constitute the seat of the intellect and imagination. The "Confessions of an English Opium-Eater" contains an instructive comparison of the effects of opium and alcohol:—

"Crude opium, I affirm peremptorily, is incapable of producing any state of body at all resembling that which is produced by alcohol; and not in *degree* only incapable, but even in *kind*; it is not in the quantity of its effects merely, but in the quality, that it differs altogether. The pleasure given by wine is always mounting, and tending to a crisis, after which it declines; that from opium, when once generated, is stationary for eight or ten hours; the first, to borrow a technical distinction from medicine, is a case of acute—the second, of chronic pleasure; the one is a flame, the other a steady and equable glow. But the main distinction lies in this—that whereas

wine disorders the mental faculties, opium, on the contrary, (if taken in a proper manner,) introduces among them the most exquisite order, legislation, and harmony. Wine robs a man of his self-possession; opium greatly invigorates it. Wine unsettles and clouds the judgment, and gives a preternatural brightness, and a vivid exaltation to the contempts and the admirations, the loves and the hatreds, of the drinker; opium, on the contrary, communicates serenity and equipoise to all the faculties, active or passive. . . . In short, to sum up all in one word, a man who is inebriated, or tending to inebriation, is, and feels that he is, in a condition which calls up into supremacy the merely human, too often the brutal, part of his nature; but the opium-eater (I speak of him who is not suffering from any disease, or other remote effects of opium,) feels that the diviner part of his nature is paramount; that is, the moral affections are in a state of cloudless serenity, and over all is the great light of the majestic intellect."

The influence of these nervine poisons is not limited, however, to the cerebral tissues. The entire nervous system participates in the morbid action, and consequently the spinal and sympathetic ganglia are also involved. As to these latter, opium and alcohol appear to have widely different relations, for the *immediate* influence of opium upon the viscera is almost exclusively sedative, of alcohol, stimulant. This difference of action shows itself also in a marked manner in the more *permanent* morbid changes induced by the two poisons; for opium finally exalts sensibility, alcohol abolishes it. These more permanent changes merit inquiry.

The constantly recurring action of a nervine stimulus, follows in its results on the appetite the law of habit; that is to say, it is at last a necessary stimulus, and is urgently desired, in the same way as food, drink, &c. But there is this difference between this morbid and a natural appetite for a stimulus—that when the latter is artificial and induces pathological changes, the need for it augments *pari passu* with the changes themselves. In habitual drunkenness, and in opium-eating, this is undoubtedly the case, although there are exceptional instances even as to them. The quantity of alcohol taken occasionally in these gradually increasing doses, is in some instances enormous. Dr. Farre mentioned to the Committee of Inquiry of the House of Commons, the case of a gin-drinker, "the largest man he ever saw," who had been known to drink seventy-two glasses of the usual drams at a sitting. Dr. Wilson mentions several similar instances. An inmate of the workhouse at Hanover had been in the habit of taking from half a gallon to a gallon of spirits almost every day. Chomel cites the instance of a patient aged thirty-four, who had been in the habit of drinking fifteen bottles of wine and four of brandy, daily. Esquirol knew another instance in which 171 *petits verres* of brandy was the daily consumption. The cause of this insatiable thirst for stimulants lies partly in the state of the blood and the nervous centres, partly in the morbid state of

the stomach. In the absence of the alcohol from the former, there is in fact nothing to supply its place, as in ordinary health; while in the inflamed and irritated state of the gastric mucous surface, there is a direct excitant of the morbid sensations we have described as resulting from this cause. Hence that indescribable feeling of sinking and oppression, which renders life intolerable to the drunkard, until the nervous centres are again stimulated. As the action of the alcohol gradually abates, in consequence of its being used up or eliminated by the excreting surfaces, a fresh supply is continually taken to supply the waste, except during sleep. This cessation from the action of the stimulant during the night is the principal, though not perhaps the sole, reason why the nervous depression is the greatest, and the thirst for spirits so urgent, on awaking in the morning.

At this, the confirmed stage of alcoholic intoxication, the brain is diseased, and both the motor and intellectual powers are, for the most part, enfeebled. The sufferer (for such he emphatically is), is incapable of any prolonged bodily exertion or continuous thought, and the incapacity for fixing the attention may increase so as to amount to confusion of ideas. Spectral illusions are not unfrequent, even although there be no actual approach to delirium, and imaginary sounds and voices are heard. The moral and emotional feelings undergo a degradation progressing *pari passu* with the cerebral disease, so that the high-minded, honourable man has become a cunning, selfish liar or cheat, the religious man a sensualist, the faithful husband an adulterer, the indulgent father a ferocious tyrant and a constant terror to his family. German writers (as Clauss and Berndt) take special note of this change in the moral character of the drunkard, designating it *Inhumanitas ebriosa*. They distinguish two principal forms, namely, *Ferocitas ebriosa* and *Morositas ebriosa*; the former is seen in men of powerful frame, is characterised by brutal violence, and often ends in furious mania; the latter is seen in individuals of a more delicate organization, following sedentary employments, and is apt to end in melancholia or suicide. Nothing is more certain in the progress of intoxication than this moral degradation. The history of drunkenness abounds with illustrations of the general principle so striking that they would be incredible if not confirmed by daily observation. We find the following in the Parliamentary Report of 1834. A widow, the aunt of a most celebrated and distinguished vocalist, fell into habits of gin-drinking and wasted her fortune. One of her sons was in the employ of Mr. Samuel Herapath, (who relates the history,) and lodged with a poor woman. He happened to go home to his wretched mother one Saturday night, and the consequence was, that while he was asleep she robbed him of his earnings, and pawned his shirt and coat to spend all in drink. The boy being ashamed to go back to his employer, she persuaded him to turn pick-

pocket, and he was ultimately transported. The same woman had actually taken every tooth out of her head except two, and sold them, so as to be able to purchase gin ; and she would have sold these also, but she could only get fourpence for the last one she had sold. Mr. Poynder mentioned to the Parliamentary Committee the instance of a man of the name of Smith, a drunkard, who was tried for setting fire to his house, in Newgate-street, and whose wife died almost immediately after he was suspected of doing it. The jury acquitted him on the ground that it was possible his wife (also a drunkard) had done it. On his death-bed he confessed that he actually had induced her to set fire to the house, and had poisoned her as soon as suspicion fell upon him, lest she should betray his secret. Ferocious crimes of every kind, prostitution, and the lowest licentious indulgence are also amongst the moral degradations of the drunkard. Domestic virtue and happiness are utterly annihilated. Mr. Broughton mentioned to the Parliamentary Committee an instance of a family, the father and mother of which were both habitual drunkards. The father was a respectable mechanic, and, in addition to earnings of two guineas a-week, might have had an income from property that came to him by will, of 200*l.* a-year. Yet his home was worse than a dog-kennel : it was one room ; there was no bed, only a few old rags in a corner, into which his four children huddled ; all occasions of nature in both ways were done in the room ; and it was quite clear, from inspection, that for the common purposes of nature they never went anywhere else. As to the development of the ferocious characteristics of man by drunkenness, the police reports in the newspapers are full of the most painful examples. Brutal violence to the nearest and dearest relatives is a frequent result of alcoholic poisoning.

The transition from this degradation of the moral and intellectual faculties, as the result of morbid cerebral action, to actual and acknowledged *insanity*, is but a step. All persons experienced in the treatment of this disease are well conversant with the general fact, that drunkenness is amongst the more common causes of mental derangement, not only, indeed, by the direct morbid action of alcohol on the encephalon of the individual, but also by the transmission of a special constitution of the nervous system (thus acquired) to his offspring, which renders them peculiarly liable to nervous affections of every kind, but more particularly to various forms of insanity, amongst which may be specially mentioned that uncontrollable desire for stimulants, termed *oinomania*. *Delirium tremens*, or the drunkard's delirium, is, in fact, an acute paroxysm of mania running its course quickly, and it is only in the acuteness of its progress, and the intensity of its symptoms, that it differs from *mania ebriosa*, or *à potu*—a real insanity.

This latter affection appears under various forms, and is relatively of frequent occurrence. In the statistical tables contained in the Report of the Commissioners of Lunacy for 1844, illustrating the etiology of insanity, 15 per cent. of the cases then under treatment were attributed to drunkenness. Dr. Carpenter justly observes, that of 4.6 per cent., in which it is attributed to vice and sensuality, an excessive use of alcoholic liquors must have shared. Moreover, in every case in which hereditary predisposition was traceable, that alone was mentioned, although it is certain that such predisposition may remain dormant altogether, if not excited into action by habitual drunkenness. It is probable that, at the lowest, the proportion of one-fourth, or 25 per cent., of all cases of insanity may be attributed to habitual intoxication, considered both as an exciting and predisposing cause. This ratio will necessarily vary, however, according as the general population is more or less given to drunkenness. In the Report of the Commissioners, the proportion assigned to intemperance of the patients in nine provincial private asylums, is $32\frac{1}{2}$ per cent.; while, according to Macnish, of 286 lunatics in the Richmond Hospital, Dublin, one-half were drunkards. Parchappe states that 28 per cent. of the cases at Rouen were due to drunkenness. At Turin, Bonacossa found the proportion of drunkards to be 22 per cent. males, and 2 per cent. females; in Holland, 11 per cent. males, 1 per cent. females. In Berlin, every third case of lunacy among the lower classes is the result of intemperance. Habitual dram-drinking is more prevalent in northern than in southern Europe, and so is insanity. In Italy the lunatics are in the proportion of 1 in 3785 of the population; in England, Sweden, Scotland, Denmark, Norway, the proportion is 1 in 783, 770, 575, 532, and 309, respectively. In our first volume we gave a table (p. 314) of the relative proportions of insane persons in Norway in 1825 and 1835, after the spirit-duty had been abolished for ten years. The increase, allowing for the increase of population during the *decennium*, was, in the towns, 32.9 per cent., in the rural districts, 69 per cent. In the various forms of insanity, the increase was, as to mania, 41 per cent.; melancholia, 69 per cent.; dementia, 52 per cent.; but most striking of all, as showing the influence of drunken parents in the cerebral development of their offspring, *congenital* idiocy had increased 150 per cent.! In 1825, before an impulse had been given to the use of spirits by an abolition of the duty, the congenital idiots were only in a proportion a little more than one-third of the whole lunatic population; in 1835 they were nearly one-half. Dr. Howe alleges as a fact, having a similar explanation, that of 300 idiots in the State of Massachusetts, whose history he investigated, 145 were the children of intemperate parents. That dram-drinking is the pro-

bable cause of this large increase (as Professor Holst, to whom we owe these statistics, affirms) is also shown by another consideration. Drunkenness is a more frequent vice amongst men than women. There entered, during one week of 1834, into fourteen gin-shops in London, 142,453 men, and 108,593 women—a great disparity, but greater if it be remembered that probably a large number of the women went to bring spirits home for their husbands. Now woman, in virtue of her special constitution, is really more predisposed to cerebral disorder than man, yet in Norway we find the proportion of male lunatics greater than of females, in all forms of derangement except melancholia. The proportion of males was 1 in 1449; of females, 1 in 1763. The preponderance of melancholic cases in the female population is the reverse of these proportions, and may perhaps be fairly attributed, in some degree at least, to the domestic misery which habitual drunkenness of the father induces in a family. Other northern countries exhibit the same coincidence between the prevalence of insanity and drunkenness. In Sweden, where the lunatics are in the proportion of 1 to 770 of the population, Professor Huss states that about half the number of insane males have been intemperate. Of from sixty to seventy men received into the asylum at Stockholm (we quote from Dr. Wilson), only ten were insane from other causes than drunkenness. In the great asylum at St. Petersburg (the Russians are notoriously a drunken people), out of 997 admitted during ten years, 837 were rendered insane, directly or collaterally, by intoxication. The specific forms of insanity which alcoholic poisoning develops may be classified under two or three principal heads. Firstly, there is the temporary or acute mania, known as *delirium tremens*; secondly, that general loss of mental power known as dementia or imbecility; thirdly, the destructive maniacs and monomaniacs, more especially the homicidal; and fourthly, the perversions of the instinct for life and physical well-being, melancholia, and suicidal monomania. The homicidal fury of drunkenness, and the homicidal impulse which the vice excites, are too well known to need special notice; nor need we dwell upon the cases of the demented and imbecile; the suicidal form is the most instructive.

Dr. Wilson distinguishes two forms of *suicidal mania* in the drunkard. In the one there is an exercise of the reasoning powers; in the other, the development of a blind impulse. The reasoning drunkard who commits suicide, stung by remorse and shame, premeditates the deed. Dr. Wilson remarks:—

“Everything reproaches him. His bodily pains, his waning vigour, his mental chagrin, his feelings of shame and repentance, yet his inaptitude for reform; his failure, not only in his duties towards society,

but his habitual outrage of its purest principles, perhaps his loss of fortune and the ruin of his family, are all sources of perpetual agony ; and he has besides systematically deprived himself of the best sources of consolation. It is in this condition that the drunkard, sinking deeper and deeper into despondency, begins to contemplate the possibility of terminating his evils, in at least as far as this world is concerned, at a single stroke ; and brooding incessantly over his purpose, and carefully maturing its design, at last, in some moment of more than ordinary desperation, or during the shame and depression consequent on some more than ordinary excess, the fatal blow is struck."

The unpremeditated form of suicide is usually observed in the very paroxysm of intoxication, and seems to be a blind impulsive act, analogous to the blind ferocity of the drunkard, the result of that morbid action which alcohol excites within the encephalon.

These statements will suffice to illustrate the cerebral pathology of drunkenness ; we will now turn to that of *opium-eating*. The public attention has not been drawn so strongly to this destructive habit as to that of intoxication, partly because the baneful effects are less public, partly because they are less injurious to the individual and to society—we say *less*, only because the evil effects of alcoholic intoxication are literally incalculable. It is well known, however, that the practice of opium-eating is much on the increase.

The pleasure induced by opium is dependent, almost exclusively, as we have already observed, upon its action upon the cerebral hemispheres. Its first influence is to refine and exalt the imagination and the intellect. The "English Opium-Eater" denies that it produces, of necessity, inactivity or torpor.

"Yet, in candour, I will admit that markets and theatres are not the appropriate haunts of the opium-eater when in the divinest state incident to his enjoyment. In that state crowds become an oppression to him ; music, even, too sensual and gross. He naturally seeks solitude and silence, as indispensable conditions of those trances, or profoundest reveries, which are the crown and consummation of what opium can do for human nature. * * * Oh ! just, subtle, and mighty opium ! that to the hearts of poor and rich alike, for the wounds that will never heal, and for 'the pangs that tempt the spirit to rebel,' bringest an assuaging balm ; eloquent opium ! that with thy potent rhetoric stealest away the purposes of wrath ; and to the guilty man, for one night, givest back the hopes of his youth, and hands washed from blood ; and to the proud man, a brief oblivion, for

'Wrongs unredressed, and insults unrevenged ;'

that summonest to the chancery of dreams, for the triumphs of suffering innocence, false witnesses ; and confoundest perjury ; and dost reverse the sentence of unrighteous judges ;—thou buildest upon the bosom of darkness, out of the fantastic imagery of the brain, cities and temples, beyond the art of Phidias or Praxiteles—beyond the

splendour of Babylon and Hekatómpylos ; and, ‘from the anarchy of dreaming sleep,’ callest into sunny light the faces of long-buried beauties, and the blessed household countenances, cleansed from the ‘dishonours of the grave.’ Thou only givest these gifts to man ; and thou hast the keys of Paradise, oh, just, subtle, and mighty opium !”

Such is the Anacreontic prose of the gifted author of “The Confessions,” in describing the primary psychological effects of opium. Its action on the hemispherical ganglia is to excite the phenomena of dreaming, both in sleep and in waking, and to virtually suspend the influence of the will on the organ of mind. This result is attained partly by its direct action on the latter ; partly, probably, by its action on the sensorial ganglia, and on the sensational periphery, in virtue of which it arrests or obtunds those multitudinous impressions which flow upon the sensorial centres from the organs of special sense, all parts of the skin, and mucous surfaces of the viscera, and which, by their continuous but varying operation, modify the states of consciousness at every moment, through the varied changes they induce on the ultimate structure of the vesicular neurine of the brain. The external world is, in fact, in so far shut out that it cannot reach the will, and operates no further than the cerebrum. It is from this continued morbid operation of opium upon the sensorial system that the *sufferings* of the confirmed opium-eater originate.

Opium, like alcohol, must be taken in continually increasing doses to produce the desired effects, and, when taken to a certain point, it also, like alcohol, becomes an imperious necessity, to which everything in life must bend. The quantity taken in a day by confirmed opium-eaters seems incredible. The “English Opium-Eater” took 320 grains per day, *i.e.*, 8000 drops of laudanum—according to his own estimate, 80 teaspoonsful—or what would amount to about *ten ounces* of laudanum ; but this is little more than one-fourth of what Coleridge took on one occasion in the twenty-four hours—namely, a whole quart ! Indeed, he had been long in the habit of taking from two quarts of laudanum in a week to a *pint* a-day.

The operation of continuous opium-eating is, like that of alcohol, to degrade and enfeeble the moral and intellectual faculties, as well as the bodily powers. Dr. Oppenheim thus describes the Turkish victim of the drug :

“The habitual opium-eater is instantly recognised by his appearance. A total attenuation of body, a withered, yellow countenance, a lame gait, a bending of the spine, frequently to such a degree as to assume a circular form, and glassy cheeks, sunken eyes, betray him at the first glance. The digestive powers are in the highest degree disturbed ; the sufferer eats scarcely anything, and has hardly one evacuation in a week ; his mental and bodily powers are destroyed ;

he is impotent. * * * After long indulgence the opium-eater becomes subject to nervous or neuralgic pains, to which opium itself brings no relief. These people seldom attain the age of forty, if they have begun to use opium at an early age. * * * When this baneful habit has become confirmed, it is almost impossible to break it off; the torments of the opium-eater, when deprived of this stimulant, are as dreadful as his bliss is complete when he has taken it; to him night brings the torments of hell, day the bliss of Paradise.”*

The “English Opium-Eater” vividly describes the loss of all power of the will and of intellectual effort, which are the morbid results of the drug.

“But for misery and suffering, I might, indeed, be said to have existed in a dormant state. I seldom could prevail on myself to write a letter; an answer of a few words to any that I received was the utmost that I could accomplish; and often not *that*, until the letter had lain weeks or even months on my writing-table. * * * The opium-eater loses none of his moral sensibilities, or aspirations; he wishes and longs, as earnestly as ever, to realize what he believes possible, and feels to be exacted by duty; but his intellectual apprehension of what is possible infinitely outruns his power, not of execution only, but even of power to attempt. He lies under the weight of incubus and nightmare; he lies in sight of all that he would fain perform, just as a man, forcibly confined to his bed by the mortal languor of disease, who is compelled to witness injury or outrage offered to some object of his tenderest love:—he curses the spells which chain him down from motion; he would lay down his life if he might but get up and walk; but he is powerless as an infant, and cannot even attempt to rise.”

Alcohol acts upon that portion of the hemispherical ganglia which is the organ of the representative faculty, and in *delirium tremens* excites the wildest phantasmagoria. So also opium, but perhaps less coarsely, or with grander imagery. As the English opium-eater lay awake in bed, vast processions passed along in mournful pomp, friezes of never-ending stories, that to his feelings were as sad and solemn as if they were stories drawn from times before *Ædipus* or *Priam*, before *Tyre*, before *Memphis*. His dream partook doubtless of the character of his imagination, which was filled, amongst other things, by oriental imagery, and impressed “unimaginable horrors” upon him. “I seemed every night to descend, not metaphorically, but literally to descend, into chasms and sunless abysses, depths below depths, from which it seemed hopeless that I could ever re-ascend.” The states of gloom which attended the gorgeous spectral phenomena of his

* “Ueber den Zustand der Heilkunde und über die Volkskrankheiten in der Europäischen und Asiatischen Turkie. Ein Beitrag, &c. Von Fried: W. Oppenheim (1853), p. 93.

sleeping state amounted "at least to utter darkness, as of some suicidal despondency, not to be approached by words." De Quincey's descriptions of his dreaming phenomena is "a very interesting addition to mental pathology." We subjoin one of many illustrations:—

"I was stared at, hooted at, grinned at, chattered at, by monkeys, by paroquets, by cockatoos. I ran into pagodas, and was fixed for centuries at the summit, or in secret rooms; I was the idol, I was the priest, I was worshipped, I was sacrificed; I fled from the wrath of Brama through all the forests of Asia; Vishnu hated me; Seeva laid wait for me. I came suddenly upon Isis and Osiris; I had done a deed, they said, which the ibis and the crocodile trembled at. I was buried for a thousand years in stone coffins, with mummies and sphinxes, in narrow chambers at the heart of eternal pyramids. I was kissed with cancerous kisses, by crocodiles, and laid confounded with all unutterable slimy things, amongst reeds and Nilotic mud."

This "cursed crocodile" became at last an object of more horror than all the rest. The abominable head of the beast and his leering eyes looked at him, multiplied a thousand times, and he stood loathing and fascinated.

The corresponding action of alcohol has been vividly described by one who has experienced its terrors, and the phenomena are interesting in comparison with the preceding.

"Hideous faces (Mr. J. B. Gough remarks in his 'Autobiography') appeared on the walls, and on the ceiling, and on the floor; foul things crept along the bed-clothes, and glaring eyes peered into mine. I was at one time surrounded by millions of monstrous spiders, who [which] crawled slowly, slowly, over every limb, whilst beaded drops of perspiration would start to my brow, and my limbs would shiver until the bed rattled again. * * * * And then the scene would change. I was falling—falling—swiftly as an arrow, far down into some terrible abyss; and so like reality was it, that as I fell I could see the rocky sides of the horrible shaft, where mocking, gibing, mowing, fiend-like forms were perched; and I could feel the air rushing past me, making my hair stream out by the force of the unwholesome blast."

The operation of continued opium-eating on the sensorial system is to develop its susceptibilities so that all ordinary impressions are painful and irritating so soon as the drug ceases to be taken. The "English Opium-Eater" thus describes the sufferings he experienced when he resolutely emancipated himself from the tyranny of the drug:—

"Meantime, the symptoms which attended my case for the first six weeks of the experiment were these:—Enormous irritability and excitement of the whole system; the stomach in particular restored to a full feeling of vitality and sensibility; but often in great pain; unceasing restlessness night and day; sleep—I scarcely knew what it was; three hours out of the twenty-four was the utmost I had, and that so

agitated and shallow, that I heard every sound that was near me ; lower jaw constantly swelling ; mouth ulcerated ; and many other distressing symptoms that would be tedious to repeat, amongst which, however, I must mention one, because it had never failed to accompany any attempt to renounce opium,—viz., violent sternutation ; this now became exceedingly troublesome, sometimes lasting for two hours at once, and recurring at least twice or three times a day. * * * * I protest to you that I have a greater influx of thoughts in one hour at present, than in a whole year under the reign of opium. It seems as though all the thoughts which had been frozen up for a decade of years by opium, had now, according to the old fable, been thawed at once—such a multitude stream in upon me from all quarters. Yet such is my impatience and hideous irritability, that, for one which I detain and write down, fifty escape me ; in spite of my weariness from suffering, and want of sleep, I cannot stand still or sit for two minutes together.”

Another form of drunkenness remains to be described,—namely, the *paroxysmal*. This is the form which has been mentioned by writers (first by Hufeland, who termed it *Dipsomania*) as a true mania, and which is recognised to be such by all practically acquainted with insanity. Erdmann first observed this affection in Russia, where it is termed *sapoi* (sauf-sucht, drinking disease, or mania). Brühl-Kramer, Erdmann, Friedreich, Henke, Guislain, and others, have also treated of it. Broussais and Rayer adopted the term *Oinomania*. Many writers have, however, treated of the affection as if it were a form of delirium tremens, to which it is undoubtedly generically allied, but from which, nevertheless, it is specifically distinct. Persons affected with the *paroxysmal* form are for the most part of temperate or even abstinent habits, and are only attacked at intervals with the disorder, which consists in the gratification of an impulse to swallow stimulants in enormous doses for a period of definite duration, when the paroxysm ceases and the individual resumes his temperate or abstinent mode of life. Dr. Hutcheson, of the Glasgow Lunatic Asylum (Report for 1842), has given the best detailed account of the disease in the English language. He notes three forms,—the acute, the periodic, and the chronic. The acute is the rarest of the three, and occurs as a sequel of exhausting causes, as fevers, puerperal or uterine hæmorrhage, excessive venereal indulgence, &c., or in certain forms of dyspepsia ; in the latter case it is very apt to become chronic. The periodic form is met with in persons who have experienced injury of the head, or who have overworked the brain, or who are the offspring, directly or collaterally, of drunkards or lunatics. Women are apt to become the subjects of it during pregnancy. The *chronic* is simply the paroxysmal form changed into *continuous* drunkenness.

When a person is about to have a paroxysm of *oinomania*, and it is not induced by any manifest excitant, as alcohol, fatigue, &c., he feels listless, uneasy, restless, and depressed, and is incapable of steady application. These feelings are accompanied by a gradually increasing craving for stimulants, which at last is yielded to. The individual, perhaps, then disappears from his home or usual place of business, and spends his days and nights in alternate sleep and intoxication, haunting the lowest dram-shops, and associating with depraved persons. Or perhaps he shuts himself up in his room, never leaving it for any purpose, and rapidly gulps down glass after glass of liquor he has procured, reckless of all consequences to himself, his family, or his affairs. The paroxysm being exhausted, a stage of apathy and depression succeeds, in which bitter regrets for his folly, and resolutions never again to yield to temptation, are prominent. This period of temperance may continue for some months, when, after an apparently trivial circumstance, the morbid cerebral condition which constitutes the paroxysm is again developed.

Friedreich notes five stages of the affection, as follows:—1. The *premonitory* stage. After a period of apparent health, and moderate use of stimulants, the eyes present a wild expression, there is spasmodic action of the muscles of the orbit, a winking of the eyelids, photophobia, flushing of the face, headache, disturbed sleep, loss of appetite, indigestion, flatulence, anxiety, and dread. This stage continues for from a few hours to a few days. 2. The *commencement* of the attack. Increased desire for spirituous drinks, which relieve the restlessness for a short time, and to this end the patient takes them, but always more and more rapidly. 3. Stage of *development*. The desire for spirits is now more than ever urgent, and the relief given by them less in time and extent; if the attempts to take them be forcibly resisted, so that the supply is cut off, the want is immediately followed by great distress, and feelings of anguish, fainting, and suffocation; indeed, not unfrequently persons thus deprived of the desired stimulants became actually insane or maniacal. 4. The *crisis* occurs in 3, 5, 7, 9, 11, 13, or 21 days. It is characterized by feelings of intense distress, so that the patient loudly bewails his state, or groans deeply, until at last urgent vomiting supervenes, when either “corrupted” bile, or in many cases a watery fluid, is thrown up. To this succeeds the greatest disgust for spirituous drinks, so that the person who but a short time before urgently demanded brandy, now shudders at the bare idea of it. 5. The stage of *convalescence* is marked by the *sequelæ* of the affection, amongst which an excited condition of the entire system is the principal. There are also sleeplessness, frightful or disagreeable spectral illusions, and depressing and distressing

sensations,—the phenomena more or less, in short, of *delirium tremens*.

The leading symptoms in the typical form of the disease are those which show themselves in the thoracic viscera in connexion with the appetite for stimulants,—namely, the feelings of anguish, restlessness, and impending death by suffocation, and those which are more purely mental, and in which the insatiable appetite is the most prominent. To these may be added the direct results of the alcoholic poisoning. In discussing the pathology of paroxysmal drunkenness, it is necessary to determine carefully the order of causation. Now, it is undeniably certain that in every case, whether it be acute or periodic, there is a special condition of the cerebrum which predisposes the individual to the paroxysm. This may be termed the *predisposing* cause. Without this, those circumstances upon which the outbreak immediately supervenes, or in other words, the *exciting* causes, could never take effect. The *proximate* cause is that condition of the cerebrum which is developed by the exciting causes in a person duly predisposed, which condition is necessary to the manifestation of the paroxysm. The operation of these causes is best illustrated by cases. A member of a liberal profession is subject to paroxysms of oinomania. He is fully aware of his infirmity, and is a water-drinker on principle; for, so long as he abstains from alcoholic stimuli, he is safe. If, however, he yields to temptation ever so little,—if he takes but a single glass of wine,—he is lost. The irresistible appetite is excited, and all the misery and disgrace of a paroxysm of drunken madness follows. This individual has a near blood-relative, a man of superior talents, who is equally predisposed to oinomania, and who, when attacked by a paroxysm, disappears from his family and home, and is found in the lowest haunts of vice and depravity, drinking with the most depraved. Both these examples are members of a family in which insanity is hereditary. In another similar case of an individual—a member of an artistic profession—there is great natural talent and aptitude for business, so that he gives the highest satisfaction to his employers; but at varying intervals of time—from a few weeks to several months—the oinomaniac is absent from his office for several days on a drunken “spree.” When he returns, great is his remorse, bitter his self-condemnation, loud and resolutely expressed his promises to resist temptation. For a while all goes on well; but, sooner or later, the temptation comes, the alcoholic stimulant is presented, is irresistible, and a paroxysm is the result, to end as before. Now the *brother* of this impulsive oinomaniac is the victim of continuous drunkenness; the *father* of both was a continuous drunkard, who believed himself to be a tea-pot, to be made of glass, &c., and who, in a paroxysm of inebriate fury, burnt

a cat alive; and the *grandmother's* brother was also an impulsive and finally a continuous oinomaniac. It is related of this grand-uncle, that his friends having taken away his clothes on a Sunday morning, hoping to confine him to the house by the want of clothing, he went into his warehouse, and donning a funeral-cloak, made his way to the dram-shop! These cases illustrate the *hereditary* transmission of the predisposition from generation to generation.

Like insanity, epilepsy, and other analogous affections of the cerebrum, oinomania may be *periodic*. Brühl-Cramer mentions a case in which the paroxysm occurred regularly every four weeks, at the new moon, and Most remarks that he thinks he has observed in several instances that the impulse to drink was the most urgent about the same time. In Henke's "Zeitschrift für Staatsarzneikunde (vol. 34), a case is related of monthly periodic drunkenness prolonged for seven years; each attack occupied eight days. The patient was a mechanic; orderly, industrious, and moral, until he was thirty-four, when he became subject to paroxysms of oinomania, during which his whole character underwent a change. After being for three weeks most industrious and steady, he would return home of an evening in apparently his usual health, but on going to bed he could not sleep on account of great depression and a peculiar sensation in the head. About one o'clock he would leap out of bed, run about the house, rush into the street, in nothing more than his shirt, and shout and rave so violently for spirit at the dram-shops, that the people were compelled to supply him; this he would drink greedily and in large quantities, until he lost the use of his limbs. Towards morning he would be taken home unconscious, where he would be confined and bound. After lying in that state, with half-closed eyes, for a length of time, he would raise himself up, look round with a wild, melancholy look, the veins of the forehead starting, his face bathed in perspiration, his pulse quick and full, his hair dishevelled, his body almost naked: he would first be abusive, twist about, and make violent efforts to free himself from restraint, and then would piteously beg and implore for spirits, his voice gradually becoming weaker. He rejected all food and drink except coffee, demanding brandy only, for without it he felt he must perish. He was usually given to drink, for the purpose of quieting him, brandy-and-water, in the proportion of one of brandy to three of water, which he would drink off with the utmost eagerness, and immediately ask for more. In this way he would go on without resting or sleeping for one moment for eight days, having brandy-and-water given to him two or three times a day, and taking hardly anything else. During this time he became gradually weaker, and his voice more and more feeble, and at last he would fall asleep, exhausted. On awaking, he had no recollection

of what had happened, felt weak, and trembled a good deal. The appetite for food then returned; he would drink water only, abhorred brandy, went back to his employment, and was an industrious, steady, temperate man until the next paroxysm. This would return at the regular period, whether he took brandy or not, and continued whether his desire for brandy was gratified or not. As years went on, the duration of the paroxysms became gradually shortened to six, five, and four days. There was no very striking decay of the intellect, although at last the termination of the case in imbecility began to threaten. He died unexpectedly during a paroxysm on the third day, appearing as if he had fallen asleep. During the paroxysms, his room was more like that of an insane person than of a rational being, had a very offensive smell, and was very filthy. The patient himself, also, looked like a maniac. The father of this man was a confirmed drunkard, and committed suicide by hanging; two of his brothers were drunkards,—only a sister and himself of the family remained free from the vice; and he showed no symptoms of oinomania until he was thirty-four.

This case illustrates the disease in the acute form described by Friedreich, and is specially interesting, inasmuch as by the character of regular periodicity which it presented, it brings oinomania into the general category of cerebral and cerebro-spinal affections, the majority of which are thus periodic. It will occur at longer intervals, however, than the month, just as mania, epilepsy, somnambulism, &c., will. Cases continuing for one week, and recurring at intervals of twelve weeks, have been observed.* In the first case which Guislain saw, the paroxysm occurred at still longer intervals; it was that of a music-master, who every year, or every two years, suddenly ceased to practise his profession, and for about three months would be continually intoxicated. The paroxysm would then suddenly cease, and the patient become scrupulously temperate, drinking nothing but water, and avoiding all chances of temptation. Feeling during one of these lucid intervals the premonitory symptoms of a paroxysm, he committed suicide. In another case (a woman) mentioned by Guislain, the paroxysms came on after lucid intervals of from three to four years.

There are instances in which the affection seems to be analogous to that strange perversion of the appetite termed *pica*, which is seen in pregnant or hysterical women, or in persons affected with chronic malarious disease, as the dirt-eating negroes. In these cases there is the same irresistible appetite for some extraordinary article of diet, as in

* Most's "Ausführliche Encyclopädie der gesammten Staatsarzneikunde," vol. ii. p. 995.

the oinomaniac for stimulating drinks, constituting in some a true monomania. Dr. Elliotson used to mention in his lectures as "an absolute fact," that a patient of this kind "has longed for raw flesh, and even for live flesh." The Messrs. Griffin had a young lady under their care of very delicate habit, who had been for a length of time suffering from oppression and constriction of the chest, hysterical fits, troublesome palpitations, and spinal tenderness, all which symptoms were aggravated once on a time, when she was at the sea-side for change of air. A blister was applied over the upper dorsal vertebræ, as far down as the eighth or ninth, with the object of relieving these symptoms, the operation of which was followed by an insatiable thirst, so that she drank a whole bottle of ale in a few minutes, besides wine, which she asked for repeatedly. She rested that night. The sequel we subjoin in the words of the mother of the patient.

"The next day at dinner she ate boiled mutton, drank a bottle of ale, and said that nothing but wine and ale would satisfy her. She had an hysterical fit of crying, but soon became calm; and seemed fairly that evening, except for the pain in her side, which, she said, nothing but eating relieved. After tea she went to bed, and asked for an egg and ale for supper; this she got, and asked for another. * * * During that night she got seven glasses of wine and camphor julep. At length I positively refused her any more, and entreated her to be still and calm; for she was frightfully impatient, talking incessantly, and begging for wine and ether. She had no oppression, but had the palpitation that night, and very much the following day. Her stomach at last grew sick, and she discharged it, throwing off much bile: she seemed better afterwards, and grew a little composed; next day I fed her thirst with slops and broth; she was exceedingly ravenous. She is now much better."*

The Messrs. Griffin, in commenting on this case, remark that the patient, in her general state of health, had a very slight appetite, and was never accustomed to more than the smallest quantity of wine or ale at any time. They think the state described to be connected with a feeling of nervous sinking, which is relieved by anything taken into the stomach. It is an interesting example of the *acute* form of oinomania. Nothing is said of the hereditary predisposition in this case, but, from the hysterical diathesis, and the peculiarity of the symptoms, one might infer *à priori* descent from a line of ancestors who had taken alcoholic stimulants unduly.

Women are not unfrequent subjects of the disorder; in two examples that have come under our notice of the recurrent or paroxysmal form in women, there were the usual symptoms of *gastritis*. The

* "Observations on Functional Affections of the Spinal Cord," &c. &c. By W. and D. Griffin, p. 52.

attacks were always ushered in by an intolerable feeling of distress about the epigastrium, amounting, sometimes, almost to a sensation of impending death. It was not easy to determine whether, in these particular cases, the gastric affection stood to the oinomania in the relation of cause or of effect; but we have seen one or two examples of incipient continuous drunkenness in which the former undoubtedly preceded the latter, and we are inclined to think that a chronic condition of the digestive organs in which this sinking sensation is a prominent symptom, and which is speedily relieved by a little hot brandy and water, or *negus*, is a not unfrequent cause of habitual intoxication in the sex. German writers designate it a *gastromalacia*, and have advocated the view that the spleen is deeply involved in the disorder. This is a feasible theory, for it is very certain that changes in the nutrient materials or composition of the blood in connexion with the supply of food and liquids, are amongst the most common antecedents to the outbreak of uncontrollable appetites.

The preceding cases and comments will amply suffice to illustrate the general pathology of this remarkable form of insanity, and it only remains for us to determine its psychological relations with a view to treatment. In the first place we may remark, that the mental condition of the oinomaniac is analogous to that in man and lower animals, in which there is an uncontrollable instinctive appetite developed, and the intellectual and moral faculties cease to act. The states of *extreme* hunger and thirst, either conjoined or occurring separately, are characterized by this uncontrollable impulse in irrational animals, and in men whose power of self-control is feeble. So also often the appetite for the natural food is impulsive, as when a carnivorous animal sees or smells his prey, or, even, only smells or tastes blood; or when herbivorous animals perceive that on which they thrive best, after having been long deprived of it. The instincts in relation with the reproduction of the species are equally impetuous, equally uncontrollable in lower animals as the appetite of the oinomaniac for stimulants.

“Nonne vides ut tota tremor pertentet equorum
Corpora, si tantum notas odor attulit auras?
At neque eos jam fræna virum, neque verbera sæva,
Non scopuli rupesque cavæ, atque objecta retardant
Flumina, correptos nudâ torquentia montes.”

Concurrently with this morbid development of an appetite there is a cessation or *diminution of the action of the will*. This is a very important point in the history of oinomania, especially in relation to those forms which are clearly to be traced to hereditary transmission, either from insane parents or from those who have enfeebled their

cerebrum by nervine stimulants. Indeed, this infirmity of the will is itself virtually a species of imbecility, not always, doubtless, accompanied by imbecility of intellect, but, on the contrary, occasionally associated with the highest powers of thought and imagination. We know of no more interesting illustration of this general fact than the history of the two Coleridges, father and son. David Hartley Coleridge was born on 19th September, 1796, a date probably antecedent to that at which his father began to take laudanum, but we have ample evidence that about this time his father's temperament and mental state were very similar to his own. Thus, at the end of 1795 or beginning of 1796, Samuel Taylor Coleridge writes, "I am almost heartless! My past life seems to me like a dream, a feverish dream! all one gloomy huddle of strange actions, and dim-discovered motives! Friendships lost by indolence, and happiness murdered by mismanaged sensibility!"* There are also abundant illustrations of his irresolute will about this date. We have seen how completely the father surrendered himself to the practice of opium-eating; great was that father's distress, nevertheless, when his son lost his fellowship at Oriel College, Oxford, by intemperance, an infirmity which beset him through life. The habitual procrastination and irresolution of Samuel Taylor Coleridge re-appeared in his son Hartley with a difference, but in common with other leading mental characteristics of the father. His brother describes, in vigorous outline, the character of a man who abhors pain as he would death, and loves pleasure as he would life, when he depicts Hartley Coleridge as he was in childhood, and foreshadowed the "coming cloud."

"A certain infirmity of will had already shown itself. His sensibility was intense, and he had not wherewithal to control it. He could not open a letter without trembling. He shrank from mental pain; he was, beyond measure, impatient of constraint. * * * He yielded, as it were, unconsciously, to slight temptations, slight in themselves, and slight to him, as if swayed by a mechanical impulse apart from his own volition. It looked like an organic defect—a congenital imperfection."*

In short, Hartley Coleridge was unsuccessful in life, because, to use his brother's words, "he had lost the power of will." Of this he was himself aware, as is proved by some lines he wrote in a copy of his poems, in allusion to his *intention* of publishing another volume.

"Oh! woeful impotence of weak resolve
Recorded rashly to the writer's shame,
Days pass away, and Time's large orbs revolve,
And every day beholds me still the same,

* Cottle's "Early Recollections," vol. i. p. 170.

† "Poems by Hartley Coleridge. With a Memoir of his Life." By his Brother, vol. i. p. lix. (preface).

Till oft neglected purpose loses aim,
And hope becomes a flat unheeded lie."

Individuals with this peculiar infirmity of will, and this engrossing appetite for pleasure, manifest, occasionally, when in connexion with the predisposition to oinomania, a tendency to pursue, at intervals, a vagabond life. So we find it was with Hartley Coleridge, who (we are informed) had "a habit of wandering and concealment, which returned upon him at uncertain intervals during the middle portion of his life, exposing himself to many hardships, if not dangers, and his friends to sore anxiety." This state of mind is, by no means (as we have seen), an unusual symptom or phenomenon of oinomania itself.

Hartley Coleridge's character illustrated another peculiarity of the class of men we are considering, namely, their tendency to painful and distressing feelings, in alternation with an opposite state; and here, again, he shall describe his own mental condition in this respect.

"Sometimes, as if with mocking guile,
The pain departs a little while;
Then I can dance, and sing, and smile
With merry glee.

But soon, too soon, it comes again,
The sulky, stifling, leaden pain,
As a black cloud is big with rain,
Is big with woe.

All I ask is but to know
The depth and nature of the woe;
I hope not for a wind to blow
The cloud away.

I hear an inarticulate sound,
Wherein no fixed sense is found,
But sorrow, sorrow without bound
Of when or where."

Hartley Coleridge's brother remarks that this kind of temperament constitutes the "humourist," and "is very marked in Shakspeare, in Swift, in Sterne, in Cowper. It is traceable in Shenstone, in Johnson, in Southey, and still more in Charles Lamb." A list of names curiously interesting to the psychologist, for, with a solitary exception, each of these men constitutes an illustration of the mental constitution we have analysed; varying, it is true, as to the minor qualities and individual position, but identical as regards the fundamental characteristics. Need we mention details as to Charles Lamb, or Southey, or Cowper, or Sterne, or Swift?

These examples are drawn from too high a type of mind to be at all common; the majority of mankind have no such gifts of intellect and imagination as they. Nevertheless, the law of transmission and development holds good. A merchant under our professional notice affected with hopeless imbecility and general paralysis, the sequel of

chronic mania, for years before his mental disorder manifested symptoms of cerebral disease. One of these was, that after smoking a cigar he could not lift his eyelids so as to open his eyes, nor, on some occasions, could he articulate the words he would utter. He took alcoholic drinks in quantity far beyond the powers of resistance of his cerebrum, and fell a victim to their morbid action. Now, this individual has a son and daughter approaching adult life. The former has been subject from childhood, at varying intervals, to paroxysms of extreme terror and distress, arising from no obvious or known cause; very similar to those which attack the oinomaniac, but *as yet* (being but sixteen years of age) without the impulsive desire for stimulants. Previously to the attack there is great irritability and restlessness, with a tendency to sleep, then the outbreak of inexplicable terror commences (usually in the night), continuing for two or three days. When it subsides, he is left weak, ill, and exhausted. The daughter, on the contrary, is passionately fond of every kind of pleasure, as dancing, society, &c.; excels in artistic accomplishments, and is singularly vivacious and animated. Both these children have manifestly derived from their father a cerebral constitution, which will endanger their well-being and happiness as years advance by predisposing to the development of those insane impulses which we have discussed, or to various forms of melancholia.

The deduction from the varied and numerous facts we have placed before the reader is obvious, namely, that both paroxysmal and continuous drunkenness present all the essential characteristics of true mania, but especially the absolute subjection of the will to an impulse or appetite; the subjection of the will and the development of the impulse or appetite being alike *dependent upon, or connected with, morbid conditions of the cerebrum*. What those conditions are, is not so obvious, but whether we look at the nature of the symptoms, the hereditary transmission of the affection, the periodicity of the attacks and the general etiology, we may clearly conclude that the cerebral changes differ little from those occurring in other analogous forms of insanity. These deductions naturally indicate the plan of treatment.

The *treatment of oinomania* will differ much, accordingly as it is paroxysmal or continuous. The great object of treatment will be to restore to the patient the power of self-control, by beneficially modifying those conditions of the cerebrum upon which the development of the appetites or impulses and the subjection of the will depend. The principal means to this end is, undoubtedly, the withdrawal of the individual from the habitual use of the nervine stimuli, the action of which upon the brain is to develop the identical morbid conditions

that constitute the disease, or to substitute others for them. But it is precisely in this withdrawal that the great difficulty of treatment, at least of the continuous oinomaniac, consists; for all experience has shown that, if he have freedom of action, no motives whatever are sufficient to restrain him from their use. Curative treatment in establishments devoted to the reception of confirmed drunkards is an idea that has been mooted from time to time. It was discussed in 1834 by the Parliamentary Committee, and, of late years, has had numerous advocates. In our last number we called attention to an attempt now being made at New York to establish such an institution there, to be designated "The United States' Inebriate Asylum." The fundamental principle of management of such institutions must necessarily be the exercise of the same kind of authority over the personal movements of the drunkard as is exercised over the insane in asylums. Sufferers from the disease have also advocated this method of treatment in their own case. In S. T. Coleridge, "the passion for opium had so completely subdued his *will*, that he seemed carried away, without resistance, by an overwhelming flood. The impression was fixed on his mind that he should inevitably die unless he were placed under *constraint*, and that constraint, he thought, could be alone effected in an *asylum*! Dr. Fox, who presided over an establishment of this description in the neighbourhood of Bristol, appeared to Mr. C. the individual to whose subjection he would most like to submit."*

Coleridge was not sent to this asylum, but was placed under medical treatment, and had an attendant whose duty it was to prevent him obtaining that by stealth from which he was openly debarred. Coleridge, however, contrived to evade every precaution, and by various cunning schemes always obtained the desired drug. It is not an usual circumstance for confirmed drunkards thus to *know* at least what is for their good, and to be ready to submit themselves to restraint. Those suffering from the paroxysmal form, Dr. Hutcheson remarks, are "so convinced of the necessity of being controlled, that when the first symptoms of their paroxysm are felt, they voluntarily enter an asylum, and remain till the attack has passed off. These, however, are men of stronger minds, though, with all their strength, incapable of resisting the disease." It is quite certain generally, that in proportion as there is a necessity for curative restraint, in the same proportion will the sufferer's will and intellect be degraded, and no motives will be sufficient to induce a voluntary subjection to control. Who with the slightest practical knowledge of insanity and of the insane can deny that there are many hundreds of persons now under restraint in

* Cottle, *Op. citato*.

asylums, both public and private, who are less dangerous to themselves and to society, more amenable to motives, possessed of more self-control,—more rational, in short, in every respect than the thousands of oinomaniacs who now infest society uncontrolled? wasting their own property and the property of others, ruining their families, displaying without hinderance the “*inhumanitas*,” “ferocity,” and “moroseness” of the insane drunkard, and transmitting to their wretched offspring their own morbid cerebral organization, as a Pandora’s box from which a host of miserable disorders will inevitably arise. If maniacal irresponsibility be the necessary and proper ground for restraint, then that ground is amply shown and undeniably demonstrated in the natural history and mental pathology of the oinomaniac. As to the general propriety and advantage, therefore, of restraint in these cases, no practical man can doubt.

The *decision* as to the propriety of subjecting any individual drunkard to restraint might be left in the hands of two medical practitioners expressly appointed to that duty, rather than to a jury, provided fixed principles for the guidance of their judgment were laid down. They would have to determine in the first instance the *facts* of the case by personal investigation and inquiry, and from these facts deduce the general conclusion that the sufferer has lost all power of self-control, and is destroying his health to a dangerous extent, utterly neglecting his domestic or social duties, and ruining his patrimony, whether it be in real estate, in personalty, or in the less tangible form of business-connexions. In multitudes of instances, the facts and conclusions would be found to be equally obvious and inevitable.

It is a much more difficult question to determine the *extent* to which seclusion and restraint of the oinomaniac should be carried, for the very obvious reasons that while a very short period of total abstinence from intoxicating drinks often suffices for the restoration of the patient to a rational condition, even when insanity of a decided character has been the result of intemperance, a relapse into drunken habits is almost certain if an early dismissal takes place, which, in fact, it is difficult to avoid; for why should you restrain a person from the exercise of his freedom, it is argued, who is perfectly rational, truly sober, and quite determined never again to yield to temptation? Nor should it be forgotten that popular opinion runs strongly against any detention of the kind whatever, on the ground that it is an invasion of the liberty of the subject, and that a man has a right to get drunk if he likes. In the Report of the Commissioners for 1844, the liberation of patients rendered insane by intemperance is discussed, and the following instance, as one involving great perplexity, is mentioned. At a licensed house in Yorkshire the visiting justices liberated

a dangerous lunatic, who had been placed therein at the instance of his wife. The man had been in a state of continued drunkenness for many weeks; he had threatened the life of his wife and child; and two of his brothers had died insane. The compulsory abstinence of the establishment had its proper effect, and when the visiting magistrates saw him, they entered their opinion in the Visitors' book to the effect, that "he appears to be perfectly sane at present, and unless sufficient cause for his further detention be shown to the magistrates assembled in petty sessions, he was to be discharged;" and discharged he was accordingly. The result was, that he again threatened the life of his wife, drove her from his home, and was again placed in the custody of the constables. As precisely the same difficulty would arise in dismissing the ordinary oinomaniac as the drunken madman, we subjoin the results of the experience of the Commissioners in reference to the latter:—

"The difficulty which we have experienced has been to determine for how long a period the patient ought to be detained in confinement after his malady has apparently ceased. We have thought it desirable that he should not be exposed too soon to the temptation of again indulging in strong liquors; it having been almost invariably found that patients of this class, if liberated without having undergone a sufficient probation, are very liable to resort to their former practices, and to relapse. At the same time, we have considered that a lunatic asylum is not a place for the permanent detention of persons who have recovered the use of their reason, and are not obnoxious to the charge of unsoundness of mind, otherwise than on account of their liability afterwards to run into their former excesses when restored to liberty. It has been our practice, in cases of this sort, to liberate the patient after a short confinement, if it be the first attack of insanity from this cause, and if he appear to be aware of his misconduct, and to have a desire to reform his habits. In the event, however, of his being confined a second time owing to the same cause, we have felt that his probation ought to continue for a much longer period; and indeed we have felt great responsibility has rested upon us in such a case, and have at all times very reluctantly, and only after vainly endeavouring to induce the patient's friends to take charge of him, resorted to our power of liberation."—(p. 175.)

The great tendency to relapse is in fact the main difficulty, for it is known that the insane drunkard is specially liable to this. Sir W. Ellis mentioned to the Parliamentary Committee the case of a man dismissed cured from Hanwell. He remained well for twelve months, then began drinking spirits again, and stabbed a policeman, for which he was committed to Newgate. He again recovered, again relapsed, and was re-committed to the same prison for similar misconduct. Mr. William Collins, vice-president of a Scottish Temperance Society, stated to the same Committee, as the result of his experience of drunkards, and as "a well-established physical fact," that the drunken

appetite, when once formed, never becomes completely extinct, but adheres to a man through life.

“If he abstains entirely from spirits, the appetite will not annoy him ; its insatiable cravings and the uneasy sensations of the nervous system will cease ; but if after ten years’ abstinence he take a glass of spirits, his appetite, like tinder, will ignite with the first touch, and flame out again. Hence the danger to which drunkards are exposed, * * * * as we find that at one time or another, when they have been drunkards before, they all fall by the slightest temptation or inducement to taste.”

Dr. Hutcheson’s experience is very similar to this. He remarks of the chronic form—

“I have seen only one case completely cured, and that after a seclusion of two years’ duration. In general it is not cured ; and no sooner is the patient liberated than he manifests all the symptoms of the disease. Paradoxical though the statement may appear to be, such individuals are sane only when confined in an asylum.”

This practical question is of so great importance that it ought to be placed on a scientific basis by instituting a more careful inquiry into the etiology, pathology, and treatment of oinomania, with a view to what may be termed its *prognosis* ; or, in other words, from an examination of the nature, causes, and progress of the disease in each particular case, to deduce safe conclusions as to the amount of self-control that can be ultimately exercised. Although nothing very definite is to be found in books, certain general principles may be deduced from the vast mass of facts recorded. Primarily, and most important of all, arises the question of causation in reference to the condition of the cerebrum. If the brain be permanently defective, then the prognosis is bad, for the organ itself of the will and of the understanding is inherently feeble. Now permanently defective conditions of the cerebrum may be induced by numerous causes. Long continued stimulation by nervine stimuli is one ; hence it is that the confirmed drunkard is usually irreclaimable. Injuries to the structure of the brain, whether from mechanical causes, from *coup-de-soleil*, from fever, or from diseases of the encephalon, which induce a constantly recurring morbid condition of the vascular system, as epilepsy, may be placed in the same category. The occurrence of actual insanity, or a known hereditary predisposition thereto, renders the prognosis very doubtful. A natural or inherent condition of the nervous system, such that the appetite for pleasurable feelings is intense, the sufferings from painful sensations great, the foresight defective, and the will feeble, strongly predisposes to relapse. We may here remark incidentally, that persons of this class who have irregularly formed heads and heavy lips, the upper one enlarged, the lower somewhat tumefied and everted, are amongst the

most incurable. Oinomania in the parents—one or both—or even what is termed a “moderate” use of spirituous liquors long continued, is of unfavourable omen, for the morbid condition of the cerebrum most assuredly caused by the latter is readily transferred to the children. Where the daughters of a drunkard are nervous and hysterical (as they very often are), and the sons weak, wayward, eccentric, and extravagant, relapses from continuous oinomania are likely to be severe and persistent in any of the family attacked.

To be continued.

ART. II.—THE RESPONSIBILITY OF THE INSANE.*

WHAT is the condition that releases a man from responsibility to the laws of society?

Notwithstanding many conflicting arguments and decisions, medical and legal, we may affirm that this question is practically solved, both according to the practice of the law and the dictates of common justice, when insanity is established. Although not convertible terms, insanity and irresponsibility are inseparably associated. Irresponsibility follows upon insanity as a logical necessity. We should, therefore, hold that the difficulty would be overcome could we expound clear and definite rules by which insanity might be known. But, in discussing this question, so momentous to society and to individuals, with the authors the titles of whose works are quoted below, we shall be compelled to consider it under another and still more complicated aspect. Dr. Mayo and Dr. Bucknill, in express terms, contend that there are certain states in which responsibility is only modified, and not annulled. They would break down the old barrier which has hitherto been deemed the natural, and served as a recognizable boundary between responsibility and irresponsibility. That barrier removed, we shall have to call upon Dr. Mayo and Dr. Bucknill to show us how far we are to travel along the road beyond the confines where sanity ends and insanity begins before we arrive at the vanishing point of responsibility. We shall have to ask them to define at what degree of madness they would interfere to stay the infliction of punishment. We greatly fear that, the only intelligible landmark removed,

* 1. *Medical Testimony and Evidence in Cases of Lunacy.* By Thomas Mayo, M.D., F.R.S. London: John W. Parker and Son, 1854.

2. *Unsoundness of Mind in relation to Criminal Acts; being the Sugden Prize Essay for 1854.* By John Charles Bucknill, M.D., Physician to the Devon County Lunatic Asylum. London: Samuel Highley, 1854.

3. *Unsoundness of Mind in its Medical and Legal Considerations.* By J. W. Williams, M.D. *Dublin Quarterly Journal of Medical Science*, Nos. XXXV., XXXVI., XXXVII. 1854-5.

we shall, like benighted travellers, have to grope our way in a dreary wilderness of speculation,—no point of departure, no guiding star, no compass, no resting-place, no progress, and no goal! Can the search for the conditions of responsibility be hopeful or profitable if thus undertaken? We fear not; but, nevertheless, we cannot shrink from the task of examining the proposition as presented to us by the authors we have named. Nor do we desire to shrink from it. The doctrine maintained by them is fraught with consequences to society too mighty, and, we think, perilous, to permit us, in conscience or in inclination, to evade it, or to pass it by without ample investigation.

We would not call down upon these authors the penalties invoked by the ancients against those who removed the Terminal Gods. We venerate the principle of liberty of thought; but we cannot, reflecting upon the subversive tendency of the doctrine we are about to discuss, avoid uttering our deep conviction that it is one that ought not to be promulgated unless supported by very cogent arguments.

In entering upon the task as presented to us, we are still, however, not freed from the necessity of seeking to determine the essential conditions of insanity as the first step in the inquiry. Even the authors we have named, although contending that responsibility passes into the cloudy regions of insanity, and unable, as may well be imagined, to indicate at what precise step of insanity responsibility ends, cannot escape from this elementary necessity. We could not, indeed, appreciate their reasons, or do justice to their arguments, unless we began by inquiring what it is that they understand by the term, insanity.

Both have, with a fatal courage, dared to enunciate definitions. Every man who throws down a definition challenges criticism. But first, we think it our duty to cite the passages in which they explain their doctrine of responsible madness. Dr. Mayo is precise, and even dogmatic. There is none of the diffidence of doubt; he lays down his doctrine with all the assurance of a man who has established it on the basis of scientific demonstration, with all the confidence of a Columbus who has made a discovery in advance of the intelligence of the age in which he lives. In his preface, Dr. Mayo tells us—"In the course of my inquiries I have been led to certain conclusions, for which I cannot expect a cordial or immediate reception." "The second (of these conclusions) arises out of the question whether some offences of the insane ought not to be visited with some form of secondary punishment." "The law will remain a dead letter, or be continually ignored by the sympathies of judges, juries, and, I may add, of medical witnesses, unless some practical distinction can be arranged which may enable the responsible insane to undergo some lower degree of punishment than that inflicted on similar delinquents being of sound mind,"

(p. 51.) Dr. Bucknill says—"It is the system of the English law to allow no degrees of responsibility. A criminal is either responsible, or he is irresponsible. . . . We are extremely happy to observe that in Ireland the administration of the law, practised with such inflexibility in England, is occasionally departed from; and, in such cases as those of William Quinlaw, L. Grady, and others, mentioned in the Inspector's reports, the Lord Lieutenant has sometimes commuted the sentence of death into transportation, on the ground of *imperfect* responsibility." He proceeds to quote, with approbation, the following extraordinary doctrine of Drs. White and Nugent:—"If there are extenuating circumstances connected with the psychological condition" (meaning, if they are insane) "of the accused, they are legitimate subjects, to be considered in meting out the after-punishment, but certainly not, in the first instance, for an unqualified acquittal." Hence Drs. White and Nugent—and Dr. Bucknill approves—see no inconsistency, nothing revolting to common sense or justice in putting an admitted lunatic upon a solemn trial for his life. Both Dr. Mayo and Dr. Bucknill lay some stress upon the French custom of making gradations of punishment by admitting "extenuating circumstances," and seek to force a kind of analogical argument in favour of their position out of this practice. But is it not a palpable *non sequitur* to apply a rule, that is not without reason when sane people are concerned, to cases of undoubted insanity? It is surely a singular solecism in jurisprudence to admit insanity as an "*extenuating* circumstance." The instance of Henriette Cornier, cited by Dr. Mayo, is not, as he supposes, a proof that insanity has been admitted by the French law as an extenuating circumstance in the light of a principle of law, but simply one of those compromises between the uninformed judgment of juries whose insufficient faith in the decision of medical science is sometimes unable to credit testimony as to the existence of insanity, and their natural sense of justice, which forbids them to visit the full penalties for crime on the heads of wretches whose responsibility is a matter of dispute.

But there is one passage in Dr. Williams' essay—an essay which for sound and original argument we cannot too highly commend—which would seem to imply that he also is disposed to admit a limited responsibility as attaching to the insane: "Where does the ability to determine on a particular act cease or commence? For accordingly must be the responsibility or irresponsibility of the offender. Experience and observation prove that this mental regulation is, to a certain extent, under a man's own control; it therefore follows that those illegal acts resulting from unsoundness of mind within the individual regulations of the will are justly regarded as crimes, while similar acts,

originating from mental conditions in which the will has no part, cannot be esteemed as other than so many evidences of insanity." (*Dublin Quarterly Journal*, p. 267, Nov. 1854.) But this seems to be put theoretically rather than as a practical law, and is not carried out by the general argument of Dr. Williams' excellent treatise.

The doctrine of responsible insanity, then, as upheld by Dr. Mayo and Dr. Bucknill, is now before our readers. We proceed to state their definitions of insanity; and then we shall endeavour to trace, as well as we can, what kinds and degrees of insanity, according to these authors, involve responsibility.

Dr. Mayo thus explains his views:—"Now, in looking for a term which may contain the essential mental elements of insanity, and, therefore, contain a criterion of its presence, I adopt delirium, as used by M. Pinel and Dr. Cullen" (p. 13). "The second phase of delirium consists in the presence of certain delusions, or false perceptions, of which there are two principal forms." The first, in which the delusion may simulate a perception of the special senses, is called by Dr. Mayo "objective delusion." This is the hallucination of French authors. Secondly, "the delusion or false perception may have no direct reference to objects of sense, but may, apparently, turn on perceptions of the understanding alone, thus embracing a large, and, I regret to say, indefinite category, which contains preposterous notions respecting power, station, conduct, moral motives, future prospects," &c. Delusions of this nature Dr. Mayo calls "notional,"—a not very felicitous term.

We postpone, for the present, criticism upon this position, and place by the side of it the definition of Dr. Bucknill. According to this acute and experienced psychopathist disease is a necessary condition of insanity. "A change, therefore, with impairment or perturbation of function, is the chief test of centro-mental disease," (p. 33.) "Insanity may be intellectual, emotional, or volitional, and though in the concrete it is not easy to find pure and unmixed cases under either of these heads, such cases do occasionally subject themselves to observation. . . . Insanity, therefore, may be defined as a condition of the mind in which a false action of conception or judgment, a defective power of the will, or an uncontrollable violence of the emotions or instincts have, separately or conjointly, been produced by disease," (p. 28.) We do not consider it important to adduce Dr. Bucknill's definition of delusion, since, according to the above definition of insanity, delusion *per se* does not imply insanity: disease must be coexistent. But since disease can, in many cases, only be presumed to exist on the evidence of intellectual alienation, we think it useful to quote the characteristic features of insane delusions as laid down by Dr. Buck-

nill. "1st. The delusions of the insane are generally independent of the opinions of others; they isolate the person who entertains them from his kind: whereas the sane portion of mankind are gregarious in their absurdities. . . . 2nd. The faith of the insane in their delusive opinions is stedfast and unflinching. . . . 3rd. They come on after some physical or moral shock, and often present strange contrasts to the previous habits of thought, or have no relation thereto. . . . 4th. In many cases they have relation to the patient alone, and are often of a kind which renders their nature apparent." He properly states that these characteristics are not constant. But we believe that it will be found of great service to bear in mind this excellent analysis of insane thought in investigating doubtful cases of insanity.

This is also the place to introduce Dr. Williams' views of what constitutes insanity. This author, perhaps warned by the Icarian fate of those whose too venturesome wings had carried them into the deceitful sun of definition, gives us no precise exposition. Taking a less ambitious course, and keeping nearer to the every-day world of human thought, he seeks for no general expression that shall include all the insane and exclude all the sane. Looking at the question merely in a practical light, he adopts the invaluable test of Gooch, who, declining all generalities, makes the peculiarities of the individual the great object of investigation. "A particular act, or succession of acts, to acquire value as a symptom of insanity, must do so through the fact of its denoting a departure from the natural and healthy character, temper, or habits. It is not, therefore, sufficient that the medical man who would determine the question of soundness or unsoundness of mind be informed of special acts which he contrasts with what he may regard as an approved standard of natural health; but it is requisite that his standard be the admitted mental health of the individual, that the acts specified may have their value determined accordingly; since, to quote the words of Dr. Combe, 'it is the prolonged departure, without adequate external cause, from the state of feeling and modes of thinking usual to the individual in health, that is the true feature of disorder in mind.'" We have only to object to this that the words, or, more properly speaking, the opinion attributed to Dr. Combe, belong to Dr. Gooch, who had developed and enforced the method of testing the individuality by itself, with remarkable felicity, in his celebrated article on the case of Mr. Davies, in the *Quarterly Review*.

We have always thought the following anecdote of Charles V. to be an admirable illustration of the futility of general definitions of insanity, and of the necessity of judging of every individual by his own standard. In his retirement from the world this celebrated man was accustomed to employ his leisure in forming curious works of

mechanism; and he was said to have been particularly curious with regard to the construction of clocks and watches. He found, after repeated trials, that he could not bring any two of them to go exactly alike, and hence was led to reflect, with a mixture of surprise and regret, on his own folly in having bestowed so much time and labour on the more vain attempt of bringing mankind to a precise conformity of sentiment concerning the intricate and mysterious doctrines of religion. "Tot hominum, tot sententiarum;" and "tot hominum, tot mentium."

The whole treatise of Dr. Williams is a most able, searching, and philosophical analysis of the question of what constitutes insanity. So able, indeed, is it, and so consecutive in its reasoning, that we find the utmost difficulty in making extracts in such a manner as to exhibit a fair and adequate idea of the character and scope of his argument. We have, however, stated in this place his leading principle as bearing upon the argument we have taken up, and hope to find other opportunities of developing his views as we proceed.

What we have to object to Dr. Mayo's test of insanity is, that it is not a medical test at all: it is metaphysical and legal. And, to describe it more closely still, it is a purely intellectual test. We do not call to mind any physician of repute in psychology, who maintains the validity of such a test in the absolute form in which Dr. Mayo states it. Perhaps the nearest approach to it is the definition of Dr. Conolly, who places the fundamental criterion of insanity in the "comparing faculty." That he has legal authority, we will not deny. He may cite, for example, the dictum of Baron Alderson, who, in the case of Robert Pate, said, "In the first place they must clearly understand that it was not because a man was insane that he was unpunishable; and he must say that, upon this point, there was a very grievous delusion in the minds of medical men. The only insanity which excused a man for his acts was that species of delusion which conduced to, and drove him to commit, the act alleged against him. They ought to have proof of a formed disease of the mind—a disease existing before the act was committed, and which made the accused incapable of knowing, at the time he did the act, that it was a wrong act for him to do." Here we have judicial authority for Dr. Mayo's favourite doctrine of insane responsibility, and for the sufficiency of the test of delusion. But we conceive, whilst expressing and entertaining a just and great reverence for the learning and integrity of the men who so worthily fill the seats of judgment in this country, that we are under no necessity, at this time, of refuting maxims and assumed rules of practice which the judges themselves had hardly uttered before they were found acting in irreconcilable contradiction with respect to them. We are amply justified in saying that the

judges who gave their exposition of the law on this subject in a deliberate Report to the House of Lords, have themselves, in practice, abandoned their own exposition; and have, in many remarkable instances, been content to accept the skilled testimony of medical witnesses, in arriving at their decisions as to the essential conditions of insanity. We will not, therefore, stop to exhibit the impracticable fallacies of legal definitions. They have been often exposed in these pages, and by many medical writers; but by none better or more conclusively than by Drs. Bucknill and Williams in the works before us. We decline, therefore, to accept from Dr. Mayo the testimony of lawyers upon this matter. As a physician, we look to him for medical reasoning; unless, indeed, what seems not very remote from the drift of his argument, he is prepared to give up the insane altogether to the law.

It is scarcely necessary now, to prove that delusion is altogether untrustworthy as a test of insanity. In fact, it is as difficult to define insane delusion as it is to define insanity. *Obscurum per obscurius*. That admirable physician, Leuret, has well said he never met with an idea in a lunatic asylum, howsoever preposterous, extravagant, and unnatural, which he had not seen matched in the world. Insanity, then, cannot consist in the idea. To centre all insanity in the intellect, is to keep out of sight that inseparable part of the human mind, the moral element, which is so often the source, *quoad* the mind, of intellectual disorder. Dr. Mayo first discards disease as a necessary condition in insanity; at another part of his work he even contends that the *mind may be diseased in the abstract*. But he goes further: not content with loosening the body from the mind, he next amputates, if we may use the expression, one part of the mind from the rest; he cuts off the moral element from the intellectual, and thus reduces man to a being without emotions, without passions, or at least, without any right to have them. Such a man has clearly no business to become insane; and, certainly, since he cannot attribute his intellectual aberration to disease, nor to disorder of the moral element, he has no right to plead insanity in bar of punishment for any act that he may commit. It is unfortunate, however, that the human intellect is cemented with earthly dross; and that the faculty of rendering the mind independent of the actions of the body, is one after which the philosopher may sigh, but which the frailty of man cannot reach.

Dr. Bucknill has dwelt ten years in an asylum. He has conducted, with more than common skill and minuteness, necroscopic researches upon the bodies of the insane. He has brought an acute and philosophical mind to work upon his observations of the wanderings of the insane mind, and of the abnormalities of the physical structures. It

would be strange if he were to believe in the independency of the mind upon the body. He speaks from an authoritative experience, when he declares his conviction that insanity invariably implies disease of the brain. And we avail ourselves of this opportunity of recording our opinion that he has rendered an eminent service to general pathology and to psychology, by his admirable investigations of cerebral disease, by observing the variations of the specific gravity of the brain in the insane. His results confirm in a conclusive manner the observations of Ferrus and Guislain, that atrophy of the brain is a frequent condition in many forms of insanity.

But, although Dr. Bucknill avoids the flagrant heterodoxy of Dr. Mayo, we are unable to accept even his definition without reservation or comment. "A false action of conception or judgment (intellect), a defective power of the will, or an uncontrollable violence of the emotions and instincts (moral), have *separately or conjointly* been produced by disease." He thus admits disease, and does not exclude any one of the integral parts of the mind. But, if it be fair to use an author's own arguments against himself, we will point to Dr. Bucknill's theory of the emotional origin of insanity (p. 83),—a theory forcibly expressed by Guislain—and ask how this theory can be reconciled with the above definition, and with the explanation of it, in which he says that pure and unmixed cases of Intellectual, Emotional, or Volitional insanity may be found? Is not this to say, insanity may be not only emotional, but intellectual or volitional in its origin? But, in another place (p. 85), he says, "The will is a faculty so simple and undecomposable that *it may well be doubted if it can ever lapse into a diseased condition.*" Shall we, then, exclude volitional cases of insanity? If we do so, Dr. Bucknill's definition will be condensed to intellectual or emotional impairment produced by disease. Now, is it true in nature, that *pure* cases of either intellectual or emotional disease exist? Is it true that the intellect and the emotions can be isolated from each other in disease any more than in health? Is it not, rather, true that there are cases of insanity in which the prominent or most obtrusive character is aberration of the intellect, or delirium, and others in which the most obtrusive character is abnormality of the moral part? But does it follow that, because one of the integral parts constituting the human mind is strikingly deranged, the other is altogether sound? We, for our own part, demur to this conclusion; and beg to refer to a passage in which we have on a former occasion embodied our ideas upon this subject:* "that as the mind can be only occupied with one idea at a time, it is, as a *whole*, affected when under the influence of

* *Psychological Journal*, vol. v., p. 466.

any specific lesion." We may say, further, without losing sight of the fact that the mind, although so constituted as to present different phases, which appear to be distinct parts, that it is in reality one and indivisible. We are disposed to regard the intellect as the highest mode of mind, rather than as a distinct component. Lower modes of mind are evinced in the active and moral powers, including the appetites, desires, affections, emotions, and the moral faculty. It is out of these last that spring all the great motions of thought and action. The intellect takes its form and direction from these. In the *mens sana in corpore sano*, a strong intellect may control every inordinate impulse, although it cannot extinguish them. In the *mens insana in corpore insano*, the primum mobile, that part from which actions take their spring and the intellect its bent, dominates over the intellectual faculties, which often struggle long but ineffectually against the morbid suggestion. It is possible, then, to imagine a diseased mind—using the term as meaning a mind alienated through disease of the physical structure—in which the intellectual aberration shall be with difficulty or not at all recognised, in which there shall be *no* delirium, but which shall, nevertheless, be under the dominion of abnormal moral powers. That such is indeed the case, the records of science and the experience of psychopathists abundantly prove. And, since the abnormality or disease of the moral powers, in many cases, only finds its exponent symptoms in the phases of the intellect, we can understand how difficult it often is to detect some forms of moral insanity. In the most perplexing cases of all, the expert has little open to him beyond the ordeal of interrogation. But, every articulate speech implies exercise of the intellectual faculties. These, aroused by the necessity of replying to questions, often come to the aid of the monomaniac, who, driven to use them under the controlling influence of observation, keeps his moral part in subjection for a time, and makes no sign that reveals his disorder. Again, as in many bodily diseases, as in ague and epilepsy, for example, although we cannot doubt in these a persistent morbid action, the frame is not at all times fevered or convulsed, so in mental diseases, the persistent moral lesion may not always be in the ascendant to such an extent as to overpower the intellect and lay itself bare to the world.

But these difficulties are *difficulties of diagnosis*; and ought not in reason to be interpreted as proof against the essential *existence* of disease.

We recognise, then, a form of monomania, not in the pure etymological signification of the word, but in that practical sense which is understood to represent what we actually find.

The moral part diseased, and the intellectual part sound and intact, is a condition that the human mind perhaps never presents. In such

a sense we should deny that moral insanity, as a disease, exists. Show us a man whose moral you say is diseased, but whose intellect is always clear and uninfluenced by his moral abnormality: and we will answer that since it is the function of our intellect to weigh what is wrong against society, and to direct aright the actions prompted by the moral, that man is responsible for his conduct to his fellow men; but we deny that such a man is insane; we deny that he is diseased.

We have thus largely expressed our ideas upon this question of the nature of insanity, because it is applicable in order to show upon what our objections to the definitions of Dr. Mayo and Dr. Bucknill rest. It is, at the same time, anticipative of what we might otherwise have to say upon monomania and moral insanity, in commenting upon the views of our authors upon these subjects. When we arrive at this point of our task, we shall be able to refer our readers back for some of the reasons we have to urge against the views of Dr. Mayo and Dr. Bucknill, to what we have just written.

The views of Dr. Mayo and Dr. Bucknill on the much-disputed subjects of monomania and moral insanity, may be, to some extent, inferred from their general expositions of insanity. The first conclusion which Dr. Mayo refers to in his preface as one of his "*adventurous speculations*,"—an epithet the correctness of which it is not for us to dispute—"concerns the ambiguous, and, as I think, mischievous nature of some doctrines, suggested by the term 'moral insanity,' or certain synonymous expressions." He who contends that delirium, the evidence of disordered intellect, is the essential test of insanity, necessarily, as we have seen, denies the existence of moral insanity. In the absolute sense, we have ourselves already said that moral insanity does not exist; but Dr. Mayo's commentary—in some places not without force—upon the cases and arguments of Pinel and Pritchard, goes much farther than this.

"I have," says Dr. Mayo (p. 53), "now to consider a peculiar state, under which the leading and important subject for judicial consideration is an orgasm, or an intense and sometimes sudden desire, which leads the sufferer to perform some criminal act; this orgasm not always susceptible of being construed into delirium, as not being obviously attended either by a morbid delusion or by a state of inconsecutive thought. In regard to this condition of the case a question instantly arises, whether in the absence of direct, it may admit of constructive proof of delirium,—that is, of a morbid state of intellect; or must be removed into the category of vice." He admits that there are some "cases of the above orgasm in which it seems to suggest to its victim an objective false perception, leading him to some criminal act to which all his feelings and moral sentiments are opposed." Thus,

when delirium is made out, Dr. Mayo would not deny a form of insanity which is usually designated as moral. But this evidence he must have, or he will allow no insanity. We must place an illustration before our readers (p. 59): "With respect to the misapplication of the plea of insanity to hysteria, we have a case of a nursery-maid, placed in Bethlem Hospital in 1846. A trifling disappointment relative to an article of dress had produced in her a wayward state of mind. She laboured at the time under diminished catamenia. An object to which she was generally much attached came in her way,—namely, the infant whom she nursed; and she destroyed it, as a fanciful child breaks, in its moodiness, a favourite doll. No fact more nearly approaching to delirium than the above was stated in exculpation or excuse at the trial. But Dr. Prichard's work was published in 1842, and by 1846, juries had learned to convert the uncontrolled influences of temper into what he terms instinctive insanity."

In reference to such a case as this we will remark that those who, like ourselves, have studied with care the influences which ovarian and uterine disorders exert upon the nervous system will easily call to mind cases without number in which such disorders, more especially those in which hysterical convulsions recur at the menstrual epochs, clearly affect the mind, both in its moral and intellectual phases, in a degree that borders upon, and not seldom amounts to, temporary insanity. We wish particularly to observe, that the mental alienation in these cases is, like the bodily disorder, of a paroxysmal and periodical character. In the intervals between the accessions an ordinary observer, or even the physician, would not detect in the conduct or speech of such a patient any aberration. He would scout the idea of insanity. Very often, also, the true and perilous condition of the patient will not be revealed by word or deed, even at the acme of the physical and mental disorder. Consciousness of her danger, and of her want of control at these seasons, will sometimes warn her to take certain precautions, and place a guard over her utterance and actions, when the period of danger is imminent. But, nevertheless, the danger is really and terribly present. From what we have observed in some patients of this kind, who, on common occasions and under the controlling influence of the observation of strangers, would pass for persons endowed with the healthiest mental organization, we should be surprised at no act which they might commit under the circumstances described. But these circumstances of abnormal ovarian and uterine function or their bearing upon her mental health, might be unknown to, and withheld from, the physician who may be consulted as to the nature of an apparently criminal act she may have committed. When brought under his observation, the insane fit, the "orgasm," may have

passed over: the ovarian excitement has subsided; the nervous commotion is subdued; no delirium remains. Judged by her actual condition she will be pronounced of sound mind; but a fatal error may have been committed, through ignorance. Taken at this time, and upon the evidence alone which this supplies, she would, if Dr. Mayo were consulted, be condemned to expiate a deed committed when insane by undergoing the full rigour of the law. But Dr. Mayo asks, if there may not be "constructive" evidence of delirium at the time of the act. We will, therefore, go back to the period of the fit. How shall we arrive at constructive evidence? Will Dr. Mayo accept the constructive evidence derived from the presumed criminal act, or from other acts that took place at about the same time? We fear not; and yet there may be no other evidence. We think we do not impute to him what is not the natural conclusion from his reasoning, when we assume that he would repudiate all construction of this kind derived from the alleged criminal act itself. And if he reject this—presumably, at least, the most irrational, the culminating act—he must needs reject those lesser acts that were committed about the same time. Besides, we do not know that Dr. Mayo would admit that action alone may indicate delirium. And yet it is impossible to forget that action may be as much an expression of the human intelligence as speech. The deaf and dumb may be insane, nay, brute animals may be insane, and not unfrequently are so. The probability of such cases Dr. Mayo would probably not deny, but we do not see in what manner, following his principles, he would obtain evidence of delirium. We will, then, seek for this evidence in speech. The typical patient we have supposed may, although possessed of the faculty of speech, have been placed in the position of the dumb madman. During the transitory paroxysm, no one may have been nigh to hear her, or the alienation itself may have been of a nature to explode in action and not in words. There may then have been no evidence, direct or constructive, of delirium such as, if we may judge by the case we have quoted from him, would satisfy Dr. Mayo. But this unhappy girl may, nevertheless, as we have shown, have been insane; there were persons of skill and judgment who believed that she was. Can Dr. Mayo, who feels so much repugnance to admit that she was insane, *prove that she was not*? What is the alternative in such a case? If we adopt the opinion of those who affirm insanity, detention in an asylum is the result; if we adopt Dr. Mayo's denial of insanity—the actual insanity, we have a right to assume, remaining the same—the gallows would cut short the dispute. According to the first position, society would, in the event of error, receive no detriment; according to the second, humanity would be outraged. We acknowledge the difficulty—the sometimes

insuperable difficulty—of arriving at conclusive evidence in cases of this nature. But difficulty of diagnosis, we say again, is no argument against the possibility of the existence of a disease. It is enough for us that such disease as we have described may and does exist. This admitted, in cases of extreme doubt, not humanity only, but science and justice, demand that our decision turn to the side of mercy.

And if we pursue the argument of Dr. Mayo, we shall find that even he supplies the materials for his own refutation. At p. 63 he quotes the case of Mendic from Georget:—"Hypolite Mendic, a non-commissioned officer in the French service, had gradually become morose, capricious, and brutal in his conduct, so as to excite the disgust of all his companions. This ends in disobedience of orders, and such violence towards his commanding officer as to render him liable on trial to the sentence of death. The trial proceeds *with the customary anxiety of the medical witnesses to make out a plea of insanity*, but in the course of the trial one weighty fact was made out,—namely, that before his outbreaks he was subject to an epileptiform seizure, out of which he emerged into the wayward state above noticed. This might fairly justify an hypothesis of delirium, as present at those paroxysms."

Now, we submit that if the hypothesis of delirium—if nothing less than that will satisfy Dr. Mayo—or of absolute insanity be fairly justified on proof of epileptiform seizures, then by parity of reasoning a similar hypothesis is justified in the case of the girl who was affected with hysteria and disordered menstruation.

On this subject we are happy to find both Dr. Bucknill and Dr. Williams agreeing with us on the leading points. Dr. Bucknill says with much truth:—"The doctrine (p. 82) has, to some extent, suffered both from bad terminology and from bad logic on the part of its advocates, and especially from its having been considered separately from the necessary and essential requisite of irresponsibility, *a state of disease*." We are very much inclined to recognise the justness of Dr. Bucknill's objections to the terms "uncontrollable" and "impulse," reserving always our opinion that the insane condition usually understood when we use those terms has a real existence. "The term impulse," he says (p. 84), "conveys the idea of force communicated instantaneously, a rapid motion; whereas the morbid desires under consideration are not of instantaneous production or of rapid growth. They arise from a chronic disease, and are resisted up to a certain point."—"The adjective (p. 85) *uncontrollable* is also liable to serious objection."—"The real question is not whether the emotions occasioning the overt act are beyond the power of the individual to control, but whether they are the result of disease." We have only to add to this the qualification

that the form of insanity commented upon is not always of slow growth, or dependent upon chronic disease; or if it be, that the duration of the antecedent disease is in some cases to all evidence short; a reservation must also be made for those cases depending upon morbid ovarian irritation to which we have alluded.

Dr. Bucknill suggests the following modification of Esquirol and Marc's classification of homicides by the insane:—"1st. Those wherein the crime has been occasioned by delusion, and no reasonable person can doubt or object to the irresponsibility of the offender. 2nd. Wherein the offender, through suffering from mental disease, has committed the crime under the influence of some motive not of a delusive character. Such are the cases of Lawrence, Touchet, Hadfield, Greensmith, Stanionght, Burton, and others. In these cases, the responsibility may be diminished or modified, but the most extended sympathy for the insane could scarcely claim for them that it should be altogether abrogated. 3rd. Where with general symptoms of cerebro-mental disease, neither delusion nor motive for the crime are discoverable. These latter are the cases which with a most unlucky phraseology have been attributed to *moral insanity*, insane impulse, uncontrollable impulse, homicidal impulse, &c."

Dr. Bucknill does not then appear to deny the actuality of those forms of mental disease commonly, although perhaps erroneously, called moral insanity; but he doubts whether, whilst admitting them to arise from disease, they ought to confer complete irresponsibility. Indeed, looking back to his definition of insanity, it is clear he is precluded from denying the existence of moral insanity. Upon the question of gradations of responsibility we shall presently have to offer some remarks.

The great question of moral insanity is investigated by Dr. Williams in the most masterly manner. A tone of thoughtful and unprejudiced reasoning pervades his elaborate and logical analysis. We again express our regret that we cannot, even by means of long quotations, convey to our readers such a digest as would not break the chain and mar the force of his argument. It is our duty, however, to place his leading conclusions upon this subject side by side with those of Dr. Mayo and Dr. Bucknill. He thus clearly lays down the problem to be solved, (p. 80., *Dublin Quarterly Journal*, No. XXXVII.):—"If then, in the commission of crime, neither the moral nor intellectual principle appears to act independent of the other, let us inquire how far they are identified, and to what extent their unity is involved, when resulting in the exercise of acts open to the charge of criminality." He thus contends against *pure* moral insanity:—"If we go to the full extent of some writers, and allow the moral intelligence to be, *per se*, diseased,

or '*Manie instinctive sans délire*' to be present, while the reasoning powers are *wholly* unaffected, what else can we suppose but that every case of confirmed viciousness is an example of such a form of disease?" At p. 279, No. XXXVI, he describes or defines monomania "as a disease in which the mind appears to suffer from a paralysis of its powers of conception, and is inadequate to appreciate the general or partial relations which the subject-matter of the monomaniacal conceptions involves." This view coincides closely with that of Guislain and Renaudin. He says:—"All examples of moral insanity which the records of criminal jurisprudence supply, may be ranged under one of the following heads: I. Cases in which the development of the moral feelings or affections appears as originally deficient. II. Cases in which the perversion of the moral feelings or affective faculties appears to occur incidentally. III. Cases in which the moral feelings appear to become universally disordered. IV. Cases in which the moral feelings appear as partially diseased." Dr. Williams thus sums up his conclusions:—"I. By the term moral insanity, we express mental unsoundness, chiefly evidenced through the moral or affective faculty. II. Though the moral and intellectual perceptions are capable of independent exercises (?), yet in their effective operations they mutually blend together and co-operate. III. Analogous differences are observable in the development of the morals of the intellectual faculties. IV. Those differences are such as seem to impart a special character or disposition to each. V. The intelligence is, in the healthy, properly regulated mind, capable of controlling and directing the moral exercises. VI. The moral or affective faculty being closely associated with the sensational, is, therefore, in nearer relation to the personality. VII. Disease, affecting the personality, may occasion morbid changes in the moral disposition without immediately involving the intelligence. VIII. From the intimate blending, intricate co-operation, and mutual dependency, of the separate mental faculties, causes producing abnormal action in the one, unusually, (usually ?) eventuate in causing derangement of the other. IX. Though in derangements of the mind the moral faculty appears primarily and solely involved in many instances, the non-development of intellectual unsoundness, through other manifestations, cannot be received as proof of its non-existence. X. The sense of moral perception is found to vary according to the nature and extent of the guidance it may have received. XI. The moral faculty, although incapable of determining positive duties, is adequate to oppose intellectual suggestions in such exercises as now immediately involve the moral perceptions. XII. A want of accordance between the moral and intellectual faculties, may proceed from either undue excitement of the moral or inefficient exercise

of the mental powers. XIII. Those causes adequate to affect either faculty must be carefully sought for, previous to offering an opinion. XIV. That as those causes involve questions of a physiological, pathological, and strictly medical nature, irrespective of their ethical, logical, or legal relations, their proper estimation requires such a combination of knowledge as none other than a psychological physician could be reasonably expected to possess." We commend these propositions, which embrace the elementary principles whence the existence and nature of moral insanity may be deduced, to the careful consideration of our readers.

We pass on to the weighty practical question before us, the conditions of responsibility, as applying to insanity in general, including the forms distinguished as moral insanity. And, first, let us state how our authors would respectively define those conditions. Dr. Mayo says: "No abnormal state of mind confers irresponsibility (an attribute which the inventors of the term 'moral insanity' conceive it to possess), unless such abnormal state of mind involve intellectual as well as moral perversion." We have already seen that, to constitute intellectual perversion, Dr. Mayo requires proof of inconsecutiveness or of delirium. From the headings of his third lecture we gather the following:—"That idiocy (!) and unsoundness of mind (a condition Dr. Mayo endeavours to discriminate from insanity) each involves some responsibility in reference to crime." He does not state or give any rules for estimating the degrees of responsibility these states involve; his definition of insanity even, being made to turn entirely on delirium, utterly failing in enabling us to determine who is sane and who is not; even if we could determine, by his test, who were insane, we should still have to seek for new evidence to determine the degree of responsibility (for the insane are not irresponsible), and yet, leaving the question thus vague, we are told by Dr. Mayo (p. 87), "Meanwhile we cannot urge that a scale of secondary punishments is involved in any insurmountable difficulties of application"!

Are Dr. Bucknill's statements more precise and satisfactory? He thus lays down his limitation (p. 15): "Insanity being a condition of partial change, it is difficult for the psychopathic physician to deduce from it the result of total irresponsibility. Logically, the loss of responsibility must be held to be co-extensive with the amount of disease." But how is this amount to be ascertained? At p. 59 he says: "*Responsibility depends upon power not upon knowledge, still less upon feeling.*" We find nothing much more precise than this. It is often difficult, as we too well know, to prove actual insanity; but what is this difficulty compared with that proposed to us of constructing a graduated scale of disease and responsibility, which, to be just or appli-

cable, ought to be as nicely divided as the scale of a thermometer! Until we are supplied with the necessary psycho-pathometer we fear we must be content to adhere to the old-fashioned and intelligible rule, that insanity confers irresponsibility.

We gather from Dr. Williams' treatise that he also would consider a modified responsibility of the insane proper, but we are unable to extract any clear or precise expression of his views upon this question.

We have, probably, already said enough to show the fundamental error and impracticability of this doctrine of the responsibility of the insane, but, before proceeding to another branch of our critique, we think it desirable to add a few more considerations. We cannot forbear quoting the just and humane reflections of Dr. Pritchard: "In the instance of instinctive insanity, or insane impulse to commit acts of violence and atrocity, to play the incendiary, or to violate the good order and decency of social life, it is obvious that the only thing requiring much consideration is the real existence of disease, and its distinction from ordinary and real criminality. . . . Whether he ought (disease being proved), in any case, to undergo other punishment (than seclusion) is a question which I do not feel disposed to discuss. As we have seen that a struggle has often taken place between the desire to commit any violent act and the conscientious feelings of the unfortunate person who is thus tempted, it is probable that some have yielded to the temptation, though convinced that they ought to have resisted it. Such persons must be admitted to be morally guilty, and to deserve to suffer. But the calamity with which we know them to be afflicted is already so great, that humanity forbids our entertaining the thought of adding to it. Perhaps all that we ought to aim at in such a case is, to secure the community against the evils to which it may be exposed."

Dr. Bucknill argues that the degrees of responsibility and of insanity stand in an inverse ratio to each other. What is this but to say—since no man is wholly insane or demented—that *no* madman is wholly irresponsible? To carry this proposition out to its logical conclusion, as it ought to be if the *principle* has a foundation in truth, would, therefore, be to bring every insane person under the penalties of the law. The plea of insanity would no longer be admitted, as it is now admitted, to exempt a person from trial. According to Judge Hale all criminals were insane: Dr. Mayo and Dr. Bucknill reverse the proposition, and say, all insane are criminal. According to them insanity ought not to be pleaded as a ground of exemption from trial. They would have the jury first determine whether the crime imputed has been committed, when the rational idea of crime is an absurdity, a self-evident contradiction, and then to investigate

the question of insanity; and then—is not that enough? No! the jury must then make out the *degree* of insanity! They must apply the yet-to-be-discovered psycho-pathometer to determine the exact measure of responsibility, and then—climax of contradictions, the judge must adjust his scale of secondary punishments, admitting the insanity as an “extenuating circumstance!”

Is it necessary to observe that this doctrine involves an entire subversion of the relations and duties of medical and legal practitioners in cases of insanity? Prisons must be substituted, to a great extent at least, for hospitals; or psychopathic physicians must become gaolers. Dr. Bucknill and Dr. Mayo would consign one of their “responsible” lunatics, if there is any meaning in this argument of secondary punishment—we presume they would not hang the very worst of them—to incarceration, as a *punishment*. Who, we ask them, is to be his custodian? Is he to be sent to an ordinary gaol? But they admit he is diseased; and who shall heal the sick but the physician? Dr. Mayo, who holds the eccentric idea that the “*mind may be diseased in the abstract*,”—a notion we shall presently discuss—would probably send him to *gaol* to be lectured to by the chaplain, and disciplined by the turnkey! But Dr. Bucknill would, as we interpret his views, send him to a special asylum for “criminal lunatics.” He would, therefore, place them under the care of a physician; but the profession and duties of a physician forbid him to be an officer for executing the final sentences of the law. Dr. Bucknill is a physician, and an able one, not a gaoler: his “responsible lunatic” would, therefore, come under his care as a *patient*, not as a *prisoner*; as one requiring *medical* not *penal* treatment. And if this be so, is not the whole case conceded, namely, that no insane person who is a fit subject—as we presume all insane persons are—for *medical treatment* can, with propriety, be made the *subject of criminal punishment*?

Shall we point to yet another subversion of all intelligible principles of sanity and insanity necessarily involved in this doctrine? Shall we ask what it is that constitutes insanity; is it the disease, the antecedent morbid lesion of the body entailing disorders of the mind, or is it the overt act of violence or wrong that makes the madman? Dr. Bucknill expressly contends that, even in the most difficult cases, namely, those of moral insanity, the terms “uncontrollable impulse” are improper, because the act was owing to “chronic disease.” What, then, is the overt act, but the accidental culminating point of disease, of insanity? Now, being diseased, the patient ought to be, and would have been, had his malady been detected in time, placed under medical care before the perpetration of the overt act. Is society to take advantage of its own *laches* and *punish* a

sick man for that act which emanated from his sickness, and which ought to have been anticipated? Who can estimate the number of deeds of violence which are annually prevented through the medical treatment of insane patients? Are they insane whilst under control and protected from committing deeds of violence; and do they only become criminal and responsible when left to themselves, with free scope for their disease to declare itself by deeds of violence?

But we have surely said enough upon this subject to leave it with confidence to the decision of every man who is willing to reason from facts, the constitution of the human mind, the first principles of justice, and to every physician who has not a theory to maintain, and who is not given to indulge in "adventurous speculations."

But we have now to exhibit another doctrine of Dr. Mayo's, which, as it is not classed with his three "adventurous speculations," we presume, so commends itself to his judgment as not to require any particular apology in introducing it to his readers. At p. 24, we find the following passage:—"That there should be a *disease of the mind in the abstract*, that such disease should work changes in us, viewed in this light, analogous to the physical changes of our bodily organs, is neither unnatural nor inconceivable (?) A parasitical growth—if for want of a proper term I may borrow this epithet from physical speculation—may take place under such disease, itself possessing vital functions and energies (!) but having no other relation to matter than the obvious one on which the tenure of our present life is based,—namely, that we have an immaterial and a material being indissolubly bound together for the duration of that life, while, for anything we know, the immaterial element may be just as subject to its proper affections as the material one is. . . . The above remarks may at least have a wholesome tendency to keep before us in our speculations *the immense fund of mental disease that may exist*, inappreciable through any knowledge that we at present possess of phenomena so little capable of being made the subject of experiment, or even observation, as those which I am SUPPOSING." (!)

And this is *not* an "adventurous speculation!" It is "neither unnatural nor inconceivable that there should be disease of the mind in the abstract!" Nay, more; it is "neither unnatural nor inconceivable" that a new immaterial entity, "a parasitical growth, itself possessing vital functions and energies," may take place under this abstract disease! He borrows this image, this "parasitical growth," from "physical speculation," and it does not check his "adventurous speculations" to find himself unable even to conceive of mind at all without having recourse to physical ideas! But having thus set up this ideal "parasitical growth," Dr. Mayo straightway applies his discovery, as if

it were an established fact in psychology, to the practice of medicine, the administration of the law, and the relations of society! It was said by Locke, and its truth is generally recognised, that we arrive at our knowledge of the human mind in general by reflecting upon the operations of our own. But it is clear from this mental experience of Dr. Mayo's that we must receive the speculations even of the greatest *abstract* philosophers with considerable caution. Dr. Mayo, we may presume, discovered this "parasitical growth" in his own mind; at least there is room for reasonable doubt that it exists anywhere else; and we should be slow to admit this speculation, although not "adventurous," nor "unnatural," nor "inconceivable," so long as it remains the undivided and characteristic property of Dr. Mayo, as a general fact in the constitution of the human mind.

But we should think this speculative abstract insanity unworthy of a moment's serious attention, but for the light it throws upon the author's conclusions about insane responsibility and the alteration of our mode of criminal procedure. We must therefore examine it a little more closely, and we take leave to ask Dr. Mayo how it was that, taking no account of the "parasitical growth," he became possessed of evidence that the mind can be "diseased in the abstract"? Has he enjoyed the singular privilege of observing the mind in the abstract in any condition, healthy or diseased? Many superstitious persons are still found who believe that disembodied ghosts exhibit themselves upon earth,—and some are said to play strange freaks,—but has any one yet seen or described *an insane ghost*? Certainly no one, unless it be Dr. Mayo. But there is another condition of mingled superstition and imposture under which it has been held that the mind can be separated from the body. Is Dr. Mayo a mesmeric philosopher? Does he possess the faculty of "projecting his mind" from his body, and so of studying it in the abstract? If it be in this manner that he has arrived at his conclusion, we must imagine that he was operated upon by a neophyte in the art, and that under unskilful "passes" poor Dr. Mayo's forsaken body did not succeed in getting its mind back again entire after its temporary divorce. If this speculation be correct—and it appears to account for the looseness of Dr. Mayo's theory—we should urge him to place himself under the hands of a more expert performer, to "project his mind" again in search of the part that was lost, and to take the opportunity of dropping that "parasitical growth" which it was so unfortunate as to pick up in its first expedition.

We are really anxious to know how Dr. Mayo has penetrated beyond the boundary of the material world, and so we will ask him another question. Is he a secret disciple or adept in the doctrine of Veda,

who, although not like Berkeley, denying the existence of matter, yet claimed for his followers the power of excluding all ideas derived from the external world, and the capacity of arriving at a purely spiritual existence? If Dr. Mayo believes in ghosts, mesmerism, or the doctrines of Veda, we trust he will exhibit the courage of his opinions, and declare himself; or if he believes in none of these, we submit that he is bound to inform the scientific world by what other means he has acquired the conviction that mind may be diseased in the abstract. Were the questions we are now considering such as interested physicians only, it would be impertinent on our part to point out by a single serious argument the necessary dependence of mind upon body. But they have an immediate bearing upon legislation, and are therefore discussed with eagerness by lawyers and all persons of education. We think it, therefore, useful to state that it is a matter of chemical and medical observation and inference that no exercise of the mind can be carried on but at the direct expense of physical matter. Let a man endeavour as he will to lose sight of his body, and to indulge in the purest spiritual reveries that he can, the result of his spiritual abstractions will be felt in the waste of corporeal tissues; brain-matter has been used, and will have to be repaired. So impossible is it even to conceive at all without the participation of the body, so idle is it to talk of insanity in the abstract!

But, however arrived at, Dr. Mayo enunciates this hypothesis. Having adopted it, some of his medico-legal conclusions will appear the less extraordinary. For example, he who argues that the mind exists as a separate entity from the body, or that it can be investigated in any other way than through physical manifestations, and that it is liable to become diseased *per se*, without respect to the body, is of course at liberty to contend that an insane person is responsible to the law, although *we* find it difficult, even from this extravagant premise, to deduce this equally extravagant conclusion. For whether the mind originate disease in itself, or acquire it from the body, is there not still disease that destroys power and responsibility? But Dr. Mayo, with stoic sternness, ever eager to bring the lunatic within the gripe of the law, advocates another doctrine which also hangs upon the theory of abstract mind-disease. He contends, of course, for responsibility under so-called "lucid intervals." We are told (pp. 49, 50) by Dr. Mayo, in combating the able argument of Ray—who with unaccountable illiberality is not permitted to retain his name as it came to him from his father, and is given on his title-page, but who is always styled by Dr. Mayo, Dr. *Rae*—"Esquirol found that out of 2814 recoveries of the insane, 292 have recurrences of the disease. These persons, then, had obtained temporary cures, and I know not

how Dr. *Rae* could refuse to any criminal outbreak of which they may hereafter be guilty, the same immunities from punishment, and on the same grounds, which he confers upon persons presumed to labour under the temporary recovery afforded by a lucid interval."

From this passage it is clear that Dr. Mayo does not know the difference between a "lucid interval," the very expression implying a continuance of disease, and a recovery, otherwise he could not apply the same reasoning to both conditions. Things opposite in their nature are not the subjects of analogical reasoning. It is necessary for us then to point out that all the most distinguished pathologists of the present day maintain that a "lucid interval" in the sense of absolute temporary recovery, the sense in which lawyers and Dr. Mayo understand it, does not exist. The supposed "lucid intervals" can only be regarded as *remissions* of the disease, the disease, like ague or epilepsy, subsisting nevertheless. Is a man free from ague, or healthy, during the intervals between the fit? Is a man liable to periodic attacks of mania, separated by intervals of comparative quiet, a healthy man? Such a notion can only be maintained by metaphysical speculatists, who dream of mental disease in the abstract. It is contrary to all sound pathology, and no less subversive of justice and humanity.

It is beyond our text on this occasion to discuss the treatment of insanity, but we cannot help asking, what hope of successful treatment is held out if we adopt Dr. Mayo's abstract speculations? Few will share his expectation that the dread of the rigour of the law, or the exhortations of ministers of religion, would exert either a curative or a preventive agency, and still fewer will look with favour upon a theory which, carried to its natural conclusion, would discredit altogether the intervention of the physician in the cure of the insane, lead to the demolition of the county lunatic asylums, and the substitution of the turnkey, the gaol, and the hulks, and even the scaffold.

Is it necessary to pursue absurdity further? Shall we ask Dr. Mayo how he reconciles it with even his sense of justice, that the body which in a case of abstract mind-disease with "parasitical growth," must be presumed to be innocent of crime, should be condemned to suffer the penalties of the law for offences for which it could no more be answerable than the inanimate weapon which the maniac or the criminal employs? It is possible that the feeling and the judgment of the age are both erroneous; it is possible that Dr. Mayo, who we are to believe has seen much more than is dreamed of in our philosophy, is right. But we cannot regret that a decision based alike upon sound principles of philanthropy and sound observation of the phenomena of the human mind, is not likely to be overturned or dis-

turbed by the baseless conjectures of men who substitute visionary and "adventurous speculations" for philosophical induction.

We pass on to the last question raised in the works before us. After divorcing mind from body during earthly life, Dr. Mayo proceeds to what, according to his own expression, is a *more* "adventurous speculation." His last step is to overturn the principles upon which the administration of justice is conducted in this country. Dr. Bucknill does not advocate the same measures as Dr. Mayo, but as we shall presently see, his propositions are scarcely more tenable or less dangerous. Dr. Mayo proposes to extend "to criminal cases that practice which actually prevails in analogous civil cases, as in commissions *De Lunatico Inquirendo*, of the examination of the party whose mental state is in question, in presence of the jury and the Court."

We scarcely think it necessary to dwell at any length upon the obvious objections to this proposal. What we have already said on the subject of secondary punishments for the insane, applies in great measure to this proposal to examine the persons pleading insanity before the court and jury. We will not stop to point out what must be obvious to every physician skilled in the observation of the insane, that such a plan is the very worst that could possibly be devised for the purpose of arriving at a just conclusion as to the sanity or insanity of a prisoner. We shudder at the thought of the horrors that might result from such a course. It often requires long observation under a variety of circumstances, of which privacy is the most essential, in order to form a satisfactory opinion as to the mental state of a person alleged to be insane. The force of the analogy from the practice in commissions *de lunatico* is more apparent than real. In many of these cases, the alleged lunatic is only present before the jury by a fiction; the inquiry in essential points does not differ from that in criminal courts; in both cases the jury *see* the alleged lunatic; they may hear him answer a few questions; but their decision turns upon the *evidence* of the medical witnesses who have seen and examined the person under proper conditions for forming their opinion. To examine in open court an alleged lunatic, who is really of sound mind, and who is accused of a criminal offence, would be in some cases to run imminent danger of discovering insanity where none existed; to examine in the same way a person really insane, would be a cruel and revolting proceeding.

Dr. Bucknill says (p. 120), "Of not less importance than some modification of the inflexibility of English law in relation to entire responsibility or irresponsibility, is the necessity of discovering some more fitting tribunal to decide upon the delicate question of insanity,

than that rough instrument of justice, a common jury." He proposes "experts," who he says, quoting from Ray, "are persons appointed in the course of judicial proceedings, either by the court or by the agreement of the parties, to make inquiry under oath in reference to certain facts, and to report thereon to the court. They are not examined as witnesses, nor have they any power of deciding the cause like arbitrators; their functions are more analogous to those of a Master in Chancery. In reference to doubtful cases of insanity, their duties would perhaps approximate more closely to those fulfilled in our own Admiralty Courts by the masters of the Trinity Company. In intricate questions of collision, salvage, and cases of that nature, these experienced mariners are summoned to aid the court, as *amici curiæ*." Dr. Bucknill fortifies his opinion by citing the following passage from the last Report of the Commissioners in Lunacy:—"If, upon the occasion of the trial of an indictment, the plea of insanity be set up, we are disposed to think that the question should be tried and determined by the court after taking medical and other evidence, and not by the common jury empanelled to try the facts."

In opposition to these suggestions, we might be content with stating the clear, common-sense opinions of Dr. Williams:—"Although we believe it to be essential that the physician have his mind thoroughly impressed with the true association between ethics and law, in order that he be the better enabled to estimate the question of mental soundness in its relation to crime; it is above all things important that in his professional opinions *he abstain from outstepping the bounds of medicine*, which freely consigns to juries the appreciation of the first, while equally denying their capability of adjudicating on the second."

We have italicised a sentiment in which we entirely concur, being convinced that nothing can tend more to lower the influence of medicine in the presence of the law than the practice advocated by Dr. Mayo and Dr. Bucknill, of trenching on the domain of either judge or jury.

"The ethico-legal considerations belong to the jury; the psycho-ethical to the physician."

"Society is fully warranted in being jealous of her rights, and equally justified in seeking to prevent any body of professional men from assuming an authority in reference to matters affecting her interests, those matters being within her own control. Both the bar and the public are, however, deceived when they presume the general not the particular application of medical opinions. The question to be determined in psychological investigations is not whether certain

phenomena indicate the soundness of the mind or morals of all men, but how far they may enable us to estimate their relative condition in a particular individual."

Dr. Williams grapples directly with the question of medical juries: "If it be contended that medical men are so pre-eminently adapted for such intricate investigations, and it be conceded that cases may arise in which the physical estimate of crime involves many abstruse and difficult considerations, it may be asked, 'Why are other than medical juries empanelled to adjudicate on such matters?' To this we reply: There are many grave and fitting reasons that the existing state of the law should be maintained. Were medical men required to primarily decide on the soundness or unsoundness of mind of an individual accused of crime, *unless their opinions embraced the act originating the accusation, their adjudication would be altogether unjust; for that act might be the hinge on which their estimate of his sanity should turn.* If, on the other hand, they include this act, the onus of proof respecting the guilt or innocence of the party accused is thereby placed in their hands; and we have no grounds for inferring that, under such circumstances, greater unanimity would prevail than is seen in ordinary tribunals. Were they to assume the act as committed, they would thereby identify the question of the accused's sanity with that of his criminality. These, and many other reasons we might adduce, have fully satisfied us that determining guilt or innocence by the voice of the jury, the soundness or unsoundness of mind by the judgment (*i. e.*, according to the evidence) of the physician, is the course best calculated to maintain public confidence and insure public safety."

We believe that the argument so well put by Dr. Williams will commend itself to the judgment of men of all professions, at least of all who do not give way to the irrational impulse to seek for a new and especial intervention of the legislature, in order to obviate every special difficulty that may occasionally arise in practice. We doubt very much, with Dr. Williams, whether the substitution of medical courts, medical *amici curiæ*, or medical juries, would improve the administration of the law in cases complicated with insanity. And of this we are firmly convinced, that no sufficient case has been made out to induce the legislature to entertain so vital a question as that of breaking down the fundamental laws of the country. Let it be borne in mind by those who are ever ready to point a jest or a sarcasm against the ignorance of juries, that ignorance is sometimes less dangerous than imperfect or distempered knowledge. And juries are not always ignorant. Let Englishmen consider whether they had not better trust their liberties to the honest plain sense of twelve of their countrymen than to a medical judge imbued with the

abstract crotchets about "parasitical mental growths" and indefinable scales of secondary punishments of Dr. Mayo. But Englishmen are not likely to forget that a jury is the shield interposed between the governing power and the citizen, in order to protect him from arbitrary and illegal assaults upon his liberty. May not a man's liberty be assailed by the false imputation of insanity? *The thing has been done*; it may be done again: and no greater facility for the perpetration of similar outrages could be given than that of withdrawing a man from the cognizance of the jury by setting up the imputation of insanity. But if juries are sometimes "rough instruments of justice," has not the institution borne, during many centuries, a fair comparison with other modes of administering justice? The Ecclesiastical Courts, in which skilled persons preside and adjudicate without the presence of juries, have not worked so well as to have found much favour with the public. Abroad, there is an universal tendency to introduce and extend the jury-system of England.

But why should juries be disqualified on the ground of their ignorance of psychology? *They are not called upon to judge of psychology, but of evidence.* To contend that juries are not competent to deal with questions of insanity, because they are not psychopathic physicians, is to contend that juries are not competent to deal with questions of engineering, because they are not engineers; with questions of law, because they are not lawyers; with questions of science, because they are not scientific; and so on, to the extinction of juries altogether, and the establishment of as many different courts, on the model of the Admiralty or of Ecclesiastical Courts, as there are professions and sciences. Heaven save us from such reforms! We entertain, however, a comforting assurance that the reflecting portion of the public will wait for stronger reasons than have yet been adduced before adopting maxims so revolutionary and so visionary, and that, in the meantime, they will stand by the motto, "*Nolumus leges Angliæ mutari.*"

We have now arrived at the conclusion of our task. We have examined the three great questions raised in the works before us with care, and have expressed our opinions upon them with freedom and with candour. The psychological doctrines of Dr. Mayo are so peculiar in their nature, and so dangerous in the applications proposed, that we have felt it as an imperative duty to expose their fallacy with all the more freedom, because the professional position of their author might obtain for them an extrinsic authority. The psychological doctrines of Dr. Bucknill are more in accordance with the researches of the most trustworthy of modern physicians. The principal objections we have had to urge against Dr. Bucknill's work are not directed against his views of mental pathology. Few physicians of the present day have given

more solid contributions to the science of cerebro-mental disease. His labours in this department have been too well directed and too zealously pursued not to have guarded him against gross psychological errors. We have been compelled, however, to criticize, with an appearance of severity, the formidable innovations which he has, upon inadequate grounds, proposed in the administration of the law in cases where the question of insanity is raised. But these medico-legal opinions of Dr. Bucknill bear no necessary relation to his psychological tenets; with the exception of the doctrine of insane responsibility, they are not absolutely incompatible with the soundest principles of medicine. They only betray a mind too eager to contrive artificial reforms, too ready to seek in legislative enactments the remedy for difficulties in practice which arise, not so much from error in the principles of our criminal legislation, as in the differences of opinion about their application in individual cases. This too hasty and meddlesome spirit of change, time and reflection will correct; and we venture to cherish the hope that, one day, Dr. Bucknill will abandon his now favourite doctrines of instituting medical juries; he will admit that it is, on the whole, best that the physician should not travel out of the legitimate paths of medicine, and that he should not seek to be invested with the incompatible attributes of judge, jury, and witness.

Of Dr. Williams's thoughtful, logical, and able essay we have had occasion to speak with almost unqualified praise. His views upon the mooted questions between law and medicine regarding insanity are not less sound and temperate than his fundamental psychological doctrines. Such an essay, so well calculated to spread a just appreciation of the medico-legal relations of insanity throughout the professions of medicine and the law, should not be suffered to remain in its present inaccessible position, scattered over three numbers of a quarterly magazine. We strongly urge upon its author the duty of publishing it in a separate and more convenient form.

ART. III.—ORIGIN OF INSANITY.*

THE work of M. Renaudin must not be regarded as a complete systematic treatise upon Mental Alienation. It is true that we possess several works which embrace more or less fully all the subjects usually considered in general descriptions of insanity, and which do not equal in bulk the book now before us. M. Renaudin has devoted this work to the elucidation of some particular questions only, of the

* *Etudes Médico-Psychologiques sur l'Aliénation Mentale.* Par L. F. E. Renaudin. Paris: 1854.

highest importance indeed, and indissolubly connected with the very foundation of psychological medicine. Were we to attempt to give the general character of this work, we should describe it as a laborious philosophical disquisition upon the etiology of mental diseases. No part of the great subject of insanity can be more important than this, none more urgently needs elucidation, and none more demands the highest powers of the psychologist and the practised skill of the physician. In the execution of our task of presenting our readers with an account of M. Renaudin's labours, we shall certainly fail in conveying an adequate conception of the great acumen, accurate reasoning, and extensive research displayed by the author. But we may hope to succeed in compressing within the narrow limits of a review his leading ideas, and to exhibit some of their most important bearings. We also believe that those who shall derive an imperfect apprehension of the interest of M. Renaudin's essays from our analysis and observations, will seek in the original for fuller satisfaction. In this event, our failing will be as serviceable as our success.

The fundamental principle of M. Renaudin consists in the proposition that it is impossible in the study of mental alienation to disregard either the psychical or the somatic element of man, and that it is equally irrational to attempt to exaggerate the importance of either element at the expense of the other. It is impossible, he observes, to isolate the moral being from the psychical being; man is a psychico-somatic duality which must be considered in its entirety under the penalty of falling into the most serious errors. Every other manner of seeing only ends in the creation of a phantasy which bends more or less to such and such a system, but which never represents the entity, from which it always differs in some salient point. When man is insane, it is not by a single part that he goes wrong; all his existence is more or less interested. He is *diseased* in the physical as well as in the moral element, in different proportions in different cases, but never to the exclusion of either of the two elements which make up one existence. It is on this fundamental idea that depends the differential diagnosis of insanity; and it is by taking this for our point of departure that we shall succeed in disengaging from the midst of the odd existences of which society presents such numerous examples, the pathological element of ordinary eccentricities or of criminal perverseness. It is on this principle of psychico-somatic duality that rests the appreciation of the many phenomena that present themselves to us in a lunatic asylum. In all the phenomena of normal psychical life we observe two features so inherent to the human nature that every language possesses special terms for the ir designation. We mean *sensation*, and the transformation of sensation into conception; *re-action* and its

transformation into action. It is in the mode of evolution and of succession of these facts that we discover certain pathognomonic signs, by the aid of which diagnosis may acquire a degree of precision especially indispensable in medico-legal inquiries. In the state of reason there is a perfect correlation between the four terms of this proportion, which is the general formula of our existence. The error that may arise under the influence of one of them is corrected by another, when the physiological state is normal. From this basis is deduced the *definition* of mental alienation, which M. Renaudin takes to consist in a lesion of the sensibility or in its abnormal exercise, over-ruling more or less the patient's will, and destroying wholly or in part the moral freedom, the basis of reason and of all moral responsibility.

The author thus expresses the differential diagnosis between mental soundness and unsoundness :—

“An opinion is stated; reason demonstrates that it is the expression of truth; it finds, however, persons who will contradict it. Tax them with ignorance, bad faith, you may; but it cannot be said that they are madmen. Their arguments are absurd, paradoxical; they enjoy their moral liberty. If they re-act but imperfectly upon their impressions, they still re-act; if they give themselves up to their errors, it is in the full exercise of their will. When, in consequence of a particular state of the digestive organs, the organ of taste does not perceive flavours in the ordinary manner, but that in announcing this abnormal sensation the patient recognises its dependence upon the organ, and not upon a change in the nature of the object, there is only partial lesion of the sensibility; there is not even error, and still less mental alienation. But if the patient displaces the error, if the psychological element does not correct it, and he admits that this flavour belongs to the object itself; if, believing in poisoning, he so far loses his moral liberty as to wish to be revenged upon the supposed authors of this imaginary crime; if, under the influence of his ideas, his affective sentiments are disturbed, the lesion of the sensibility is then complete, and insanity is easily recognised. It is true, then, from this example, that a man is rather insane through defect of reaction against error than through the error itself, for the patient no longer reflects the impression, he bears it without control, and abandons himself to it without reservation.”

Such is an instance in which the origin of the error lies in the somatic element. Take an example in which the psychological element is the point of departure :—

“A man is odd, eccentric, pusillanimous, or proud, without judgment enough to give the right signification to the facts passing around him, nor enough discretion to regulate his instincts and inclinations. Under the influence of this idiosyncrasy there arises a passion which establishes for a moment a state of equilibrium; it is upon this passion that depends the direction given to the sentiments and to the affections,

which are as variable as the stimulant. His entire existence is organized upon this incongruous assemblage, without our being able to say that there is insanity in the nosological meaning. Such a man is properly held responsible for his acts, so long as no pathological lesion complicates his situation. But if these irregularities of conduct go to the extent of modifying his constitution, if hallucinations become the point of departure of his determinations, his originality becomes exaggerated and pathological, because his sensibility is involved in its double psychico-somatic relation. These facts show that insanity may spring from the irritation of each of the two elements, and that one or the other may dominate in turn, according as it is either cause or condition of causality. But mental alienation is confirmed only when lesion of the general sensibility is present."

Proceeding from this basis, the author goes on to trace with great minuteness the development of psychical life, the conditions of causality, the transition from reason to insanity, ideas and their relations with the general sensibility, instincts, wants, the development and formation of ideas, and the types of mental alienation. These subjects of course involve the elemental questions of psychology, and we may spare a detailed exposition of the author's views upon these by observing that they agree closely with those of Reid. He admits fundamental ideas,—that is, ideas which stand upon the foundation of common sense, and secondary ideas deduced from the first by judgment and discernment.

Concerning the types of mental alienation, he observes:—

"If the insane present general characters by which the perturbation which governs them is recognised, observation teaches us that the intellectual disorder is not the only pathognomonic symptom, and that insanity constitutes a group of fundamental types having special characters and course. However varied the phenomena that accompany or constitute the delirium of the madman, certain primordial aberrations are detected, around which turn the secondary symptoms peculiar to the individual. It is in the reciprocal relations of the sensibility and the reaction, that we find the elements of the nosological table of mental alienation."

Following Esquirol and other authors of the French school, he recognises four fundamental types: monomania, lypemania, mania, and dementia. Monomania is chiefly marked by a surexcitation of the sensibility, producing an energetic re-action, which exaggerates spontaneity, the feeling of personality, and modifies the psychico-somatic relations of the subject with the outer world. It is under the influence of this state that certain expansive passions, reaching a pathological development, assume the direction of delirium, involving errors of personality which, binding the moral freedom, become the exclusive motors of the will. This delirium is more or less organized according

to the intellectual aptitude, and in some subjects it puts on all the characters of a mortifying logic. If in this form of mental alienation we almost always observe the same organic lesions, we must nevertheless admit that the psychical element predominates, and that in a somatic point of view the delirium may be considered as more exclusively cerebral.

In lypemania there is also surexcitation of the sensibility, but this is painful, and often proceeds to stupidity, a sort of chronic spasm which suspends for a greater or less length of time the most important functions of the psychico-somatic existence; re-action is incomplete, insufficient, or wanting.

If we examine the general phenomena of insanity, we are at first tempted to admit but two principal forms, which seem to include all: mania and dementia. But more careful analysis reveals that mania bears a peculiar stamp which constitutes it a distinct type. The most frequent form of mental alienation, mania, is especially characterized by disorder of the sensibility, to which corresponds an analogous disorder of the re-action, in which the mobility is principally noticed. It is the anarchy of the passions and sensorial functions.

In dementia the spectacle is very different. The sensibility is either blunted or restricted, the re-action is almost null. Physical lesions predominate, and animality has assumed the upper hand. Intellectual life has disappeared under the influence of a vegetative existence.

M. Renaudin having thus laid the basis of his psychological system, both physiological and pathological, proceeds to investigate minutely the etiology of insanity. And upon this point we may take the opportunity of observing, that it is in the profound study of the remote, as contradistinguished from the immediate, causes of insanity, that we must look for the most accurate and scientific extension of our knowledge of mental pathology. It must be obvious to all those who have devoted their minds to this subject, that the path hitherto pursued in the accumulation of what are presumed to be etiological data is one pregnant with error. In the etiological tables systematically kept in most of the continental and British asylums, the proximate exciting cause is chiefly kept in view. Poverty, reverses, mental concussions, physical lesions, and other circumstances apparently connected closely in point of time with the outbreak of open insanity, are set down as the causative agencies. An imposing statistical battery is then formed by the enlistment of the figures contributed by a number of different asylums into one aggregate. Any doubts that might be entertained as to the value of similar data in the elaborating of etiological laws, when drawn from a single asylum, and confined to a limited number of

cases, become surprisingly dissipated when we are confronted with the formidable array of figures drawn from many asylums and some thousands of cases, all made to swell the different heads. There is nothing so hard to contend against as so-called statistical evidence. He who resolutely resists the conclusions put forth by many ardent advocates of the numerical method—conclusions which it is triumphantly announced rest upon facts multiplied to the extent of eliminating the possibility of error—is apt to be decried as one impenetrable to the plainest of all demonstration. We will not for a moment call in question the immense value of the numerical method in the determination of all questions to which that method can be rigorously applied, under all the necessary logical conditions. The first and most absolutely required of these conditions is, the accuracy of the individual facts registered. What if there be any fallacy here at the starting point? Can any accumulation of individual errors make up an aggregate of truth? And to secure precision in the primary facts is a difficulty hard to overcome. We have no concern in this place with the application of the numerical method to problems in general pathology. We believe it possible in many questions in general medicine, such as the mortality from particular diseases, and possibly the value of certain modes of treatment, to register and collect a sufficient number of homogeneous facts to warrant definite conclusions. But we very greatly question whether it be, at the present epoch of our knowledge, possible to apply such a system to the investigation of psychological questions without imminent danger of arriving at false conclusions, and by so doing, of erecting a series of arbitrary conventional dogmas, which, so far from facilitating the attainment of truth, would have the opposite effect of concealing it from our sight, by filling the mind with a specious but false idolatry. Let us take a familiar illustration. In etiological tables we sometimes find intestinal worms assigned as the causes of certain cases of insanity. It may be conjectured that in some of the cases so classified, insanity would not have declared itself had not the intestinal worms been present; so far, intestinal worms may with propriety be said to have been the cause of insanity. But if we analyse a little further, and reflect that many persons have intestinal worms for a very lengthened period without exhibiting any disposition to insanity, we are driven to the conclusion that there must be some antecedent condition in the subject, some peculiar modification—to resort for the occasion to M. Renaudin's phraseology—of the psychico-somatic constitution, predisposing him to become insane, if brought within the operation of sufficient determining agencies. We must believe that in the case of a person having such a proclivity, the influence of intestinal worms is purely accidental, and that if he be

supposed to escape this particular influence, then he might fall under the influence of some other conventional cause—as grief, for example—and then, under the actual arbitrary etiological tables, the same radical psychopathy would have to be transposed into another column. And thus *decipimur specie recti*. It is in a similar manner asserted that intestinal worms cause epilepsy. But how many persons are there who, being afflicted with worms, yet never become epileptic? There is here also an antecedent idiosyncrasy, an epileptic actuality, without which neither worms nor any other circumstance will give rise to epileptic fits.

It may, indeed, be urged that, although the registration of circumstances associated in time with the outbreak of insanity may not lead to any accurate understanding of the essential conditions of insanity, it may have its use in indicating those obvious disturbing agencies which favour the development of insanity. Such being well determined from tables of this kind, the physician has acquired valuable indications in practice. We doubt whether, even with this limitation, it is not giving undue prominence to the class of accidental agencies, or causes, to make them the heads of etiological columns. The physician knows well enough, without the aid of statistical tables, that intestinal worms may lead to the development of various pathological conditions. Whenever such a case comes before him, whether he apprehend epilepsy, insanity, or any other disease, he will expel the worms. The study of secondary causes by means of statistical tables, therefore, does not lead much nearer to the real object the psychological physician must ever have in view, namely, the discovery of the latent pathological substratum, the insane actuality existing, perhaps, from birth, and often transmitted from generation to generation. The influence of heredity has not, indeed, been overlooked; but we doubt whether it has been rightly appreciated, and we do not doubt that much, very much, still remains to be done in detecting the genesis of mental aberration in persons who may be supposed to be free from hereditary stamp. The primary influences which create the insane actuality are often lost, obscured by lapse of time, unobserved, not remembered, and the mind of the physician, hankering as the human mind will for the definite, fixes upon a later period in the development of alienation, and seldom fails to associate some marked mental aberration and tangible exciting circumstance; and to behold in them a relation of cause and effect. But how much of insanity might there not be, and how many mind-impairing circumstances in operation, *prior* to the date at which he took up the psychological history?

It is in the minute and philosophical analysis of the insane constitution, and of all the elemental causes which assist in the genesis of

insanity, that lies the great merit of M. Renaudin's work. He begins by discussing the subject of hereditary predisposition; he considers the influence of temperament, character, the intellectual aptitude; the influence of age; the predispositions proper to each sex; and the influence of education on the physical and moral development. We will cite a passage on education which is especially interesting.

"Man is not a *tabula rasa* upon which we can inscribe any characters we please. Anteriorly to all education, there exists psychosomatic predispositions which must be taken into account; and many friends have had to pay dearly for the adoption of an *à priori* exclusive system settled before the birth of the child. From the commencement education is exclusively physical, and is summed up in two primordial indications, which must never be lost sight of, even throughout the whole course of existence; the normal and harmonious development of all the parts of the organism, and the direction of this development into habits fitted to ensure its regular play. We must at first avoid opposing to the aimless mobility which characterizes the infant a coercion antipathic to its nature, and more calculated to increase its native irritability at the expense of the locomotive system, the development of which ought to be encouraged in order to counterbalance the predominance of the nervous system, which is too easily impressionable at this epoch of life. It is to the defect of equilibrium between those two essential elements that we must attribute those numerous nervous and convulsive affections of early infancy which, as much as heredity, are a predisposition remote, but almost certain, to the ulterior development of mental alienation."

The influence of education is admirably discussed. If we were, however, to hazard an opinion upon the author's doctrines upon this subject, we should be disposed to object that he has exaggerated the effect of education in the production of insanity. That a badly-directed education may tend to develop unduly either the mental or physical element at the expense of the other cannot be doubted, but that mental alienation should frequently take its origin from this point of primitive departure is not easy of demonstration. Even in cases supposed to be of this nature, were a rigorous analysis possible, it is highly probable that we should, for the most part, discover an antecedent insane actuality, rendering the individual peculiarly susceptible to the operation of disturbing causes. To maintain that education has an absolute potential influence in the production of insanity is to maintain that all mankind are hanging in the balance between sanity and insanity. It is certain that no amount of error and vice in education will evoke positive insanity in some organizations.

In his exposition of the intellectual and affective elements of the human mind, M. Renaudin wisely abandons the attempt to adhere to a

refined classification and isolation of the different passions and modes of thought. "Man," he says, "is one indivisible whole, and whatever care we may bring to the analysis of his sentiments and reactions, we only succeed in isolating them for a moment, in order the better to recognise the intimate union and reciprocal dependence of the two elements of which he is made up." He, therefore, confines himself to the study of the succession of phenomena rather than to their classification. An able chapter is devoted to the faculty of reason, free-will, and the question of responsibility. He thus explains the reasoning power so often observed in the insane.

"It is an incontestible fact that the monomaniac or the lypemaniac reasons and follows, in the thread of his delirious ideas, the path of ordinary reasoning. Far from undergoing, in this pathological condition, any impairment, the intellectual aptitude seems, on the contrary, to concentrate itself with so much energy that, during the period of incubation, the patient makes of his existence two distinct parts. The one has all the appearances of reason; its relations with the external world are preserved with extreme care. In the other, on the contrary, which remains impenetrable to all, the delirium becomes completely organized, in order to declare itself at a moment when it is no longer time to arrest its course."

How many illustrations do we not see of this condition! There are, even beyond the walls of lunatic asylums, not a few men who exhibit to the world one phase only of their mental existence, and who cherish for themselves alone an ideal life full of extravagance, of absurdity, of actual insanity.

In another chapter the author examines the influence upon man of his relations with the surrounding world. Under this head he surveys the bearings of civilization, celibacy or marriage, political institutions, arts, trades, the hygiene of various professions, changes of fortune, and religion. The limitation he assigns to these agencies is one which we could have wished him to have assigned to education. He says, without regarding the surrounding medium as a direct pathogenic agent, it must be considered to be a predisposing condition to some virtualities. Whilst admitting this influence, however, he says, it is subordinate to the reaction of the subject, and however bad the conditions of the medium may be, it is rare not to find in him a compensative prophylaxis against his dangers.

In the sixth chapter the author traces the psychical signification of the different functions as well as of their principal modifications. After some general reflections upon the different functions, he examines the influence upon the mind of alternate activity and rest; the relations of the nervous functions of the circulation; the psychical signification of the organs of sense; that of the digestive functions; of the

abuse of alcoholic drinks; of the generative functions. It is so true that the genesis of insanity must be sought for in physiology itself, and its development traced, step by step, through the apparently most trivial deviations from health, that we may frequently discover in the normal varieties of functions the starting-point of hallucinations and of delirious conceptions. This subject, so important to the full understanding of the etiology of insanity, and essential to a right interpretation of its phenomena, is treated by the author with singular accuracy of description and great acumen in tracing the bearings of functional irregularities upon mental health and disease. With the same power and success he advances nearer to the consideration of the immediate sources of insanity in his appreciation of the psychological signification of the pathological modifications of the different functions. Indeed, it is in the reaction of various morbid states of the different functions upon the mind that we frequently witness the transition into insanity. In discussing this subject the author is naturally led to estimate the spiritual and somatic doctrines of insanity. The exposition we have already given of his leading principles furnishes the clue to his views upon this question. He is neither exclusively spiritualist or material. The two elements are affected together, and the one cannot be isolated from the other. He refers to the principles of moral treatment of Leuret, which, he says, have had the effect of postponing the investigations of a wholesome nosology. The natural reaction against this conclusive doctrine led to the opposite extreme, so that many physicians, adopting a materialism no less exclusive, believed that they should find in pathological anatomy the secret of the disorder presented by the delirium. This was to fall into error, for it was running the risk of confounding effect with cause, and of connecting the intellectual disorders with certain lesions which had only become developed under the influence of insanity. Where a moral impression is experienced, it has, in the first place, a physiological reaction upon some part of the economy, then a pathological reaction, and upon this depends the invasion of insanity. On the other hand, all pain, every pathological modification of the functions, has a psychological correlation which is only fatal when the moral force yields. It is, therefore, in this pathological condition, in some sort mixed, that lies the knot of the question. According to the definition of mental alienation given by the author, we have seen that the primordial phenomenon consists in a modification of the general sensibility. He therefore applies himself to the task of studying how disease in general can modify sensibility, and what is, according to the nature of certain special diseases, the mode of perturbation, direct or sympathetic, which may result. We must refer the reader to the work itself for the distinction between

the delirium of fever and the delirium of the madman. The hallucinations which appear in the delirium of fever have a peculiar character, which does not permit them to be confounded with those of the really insane. This character is more especially somatic.

The subject of hallucination is investigated at great length. He points out that illusions and hallucinations have often been confounded, and thus sets forth the diagnosis. Illusions and hallucinations have this in common, that they constitute erroneous perceptions; the sensation is real, the perception is inaccurate; and when there is alienation the perception is still more inaccurate. There is illusion when the individual assigns to external objects characters and forms which they do not possess. It is an error of objective perception. In hallucination, properly so called, the object or external agent does not exist, and the sensation is perceived just as if they were in relation with the economy. It is an error of subjective perception, often confounded with instinctive predominance. In order that illusion may exist, it is necessary that there be external to us a real object that strikes the senses, and that in consequence of an objective sensation, more or less complete, there be erroneous perception. This error of perception has its origin in our senses, in the object itself, or in the medium which separates it from us. Examples of illusions depending upon the last cause are of constant experience. Hallucination, on the other hand, a perception exclusively subjective, has its origin in the reciprocal reaction of the sentient extremities and of the centre of perception. It recognises for cause or condition of causality the physical influence, as well as that of the psychical element. The subject of hallucination *feels*, but the cause of his sensation is in himself, instead of being beyond himself; no object strikes his senses, and he is persuaded that everything he experiences results from the impression produced by external agents. Two fundamental facts must be carefully distinguished in this case: there is either a modification of the sensibility by excess or defect, or else there is error as to the cause of the sensation. One takes a rheumatic pain for the result of violence of which he is the victim. Reduced to these terms hallucination might be confounded with illusion; but these misunderstood victims see the individuals who torment them, hear their voices, and even in secret are present at the conspiracies laid against themselves. Are you deceived as to the nature of a sound heard, that is an illusion; do you hear a sound that does not exist, that is an hallucination. If a person speeds along the streets, thinking he is pursued by all those who are walking behind him, if he supposes their pace more hurried than is really the case, he is the victim of an illusion: but if, under the influence of a delirious preoccupation, he

imagines himself to be insulted by persons who are silent, and hears distinctly expressions that no one utters, there is hallucination. In the first case there is only an erroneous interpretation; in the second, there exists, beyond the individual, nothing to interpret, everything passes within himself.

But "hallucination, or rather the hallucinatory condition, does not constitute mental alienation, nor can it form a distinct species in this nosological family. Preceding or following the invasion of the insane, delirium it is not a constant essential symptom; and if we observe it in the outset, or in the course of the affection, we may ascertain that it is far from possessing that character of persistence which is the mark of every typical affection. Limited, in many instances, to a simple diseased virtuality, it often presents nothing by which it can be distinguished from what is observed apart from all delirium. It is, therefore, when it exists an element of delirium without being the delirium itself, and if it be sometimes an essential condition of causality of this, that depends either on the surrounding medium, or on special circumstances connected with the idiosyncrasy of the subject. It is, if I may so express myself, central or peripheral; and we find its primordial evolution either in the psychical or in the somatic element. Whichever be the point of departure, it only becomes a fact in mental pathology when there is simultaneous or successive action of both."

In this country, and especially in our courts of law, whenever the question of insanity is raised, there is nothing so much insisted upon as the existence of something which is referred to as "delusion." Many lawyers take the presence or absence of delusion as their decisive test of mental unsoundness or soundness. But no definition they have furnished of the term is capable of practical application. They call for evidence of that which they cannot define. In most *civil* cases they would not hesitate in pronouncing that person insane who should exhibit marked morbid sensorial hallucinations; in *criminal* cases, the same conclusion would be less readily admitted. Of all the various mental phenomena which are confounded amongst us under the common name of delusion, none is considered more undoubted proof of "delusion" than hallucination. But medical psychologists, who carry the analysis of mental operations further than lawyers, have well ascertained that something more than delusion, as the term is commonly understood, is necessary to constitute insanity. There is something beyond; it is that something which it requires the skill of the medical psychologist to discover and to decide upon. Leuret has well expressed the difficulty in the following words:—

"I have not been able, whatever pains I have taken, to distinguish by its nature alone a sane idea from a reasonable one. I have sought at Charenton, at Bicêtre, at the Salpêtrière, for the idea which seemed

to me the most mad; then I have compared it with many of those which are current in the world, and I have been astonished and almost ashamed at not perceiving any difference."

The same difficulty is also admirably set forth by our author. If it were possible to regard mental alienation solely from a metaphysical point of view, it would then be possible for lawyers, as well as physicians, to enter upon the task of diagnosing unsoundness of mind, with an equal prospect of success. But that is not possible; and since in every case of insanity, the physical as well as the psychical element is compromised, and that the psychical phenomena are always directly modified by the changes in the physical structure, one cannot avoid a feeling of astonishment at seeing men necessarily ignorant of the structure of the human frame and of its relations to the mind, pronouncing authoritatively the most absolute dogmas upon the most difficult points of general mental pathology, and delivering the most unhesitating decisions upon the sanity or insanity of individuals whom perhaps they have scarcely seen.

Proceeding with his subject, M. Renaudin traces the *mode of manifestation* of insanity. He denies at the very outset the very common opinion that all insanity consists in frantic raving and tumultuous agitation. Fury, he contends, is only an accident, a complication, and by no means the essential character even of mania. He quotes, with approbation, a passage from Esquirol, which, as it conveys a great truth, is reproduced:—

"It is through having mistaken fury for insanity itself, through having attributed to this symptom a great therapeutical importance that so many grave errors have been committed in the treatment of the insane. The furious were bled to excess, with the intention of reducing their strength, and it was not perceived that the loss of blood increased the evil, that it only calmed the patients by depriving them of the power of reaction necessary for the resolution of the disease. * * * Since these unfortunates have been treated with benevolence, the number of the furious has diminished to that extent, in asylums properly conducted, that out of several hundred lunatics sometimes not one is seen in a state of fury."

M. Renaudin adds, that fury had vanished from the asylum of Maréville, which he governs, since they have ceased to take it into account in the internal organization of the establishment.

He observes that the course of mental alienation offers difficulties which it is important to signalize after having disengaged them from the complications which to some extent masked the fundamental phenomena. In the most regular succession of its symptoms, insanity presents itself at first in an acute condition, and the observer detects a reunion of phenomena, having a relation to the type it has definitively

assumed. Then follows a transition-period, which terminates either in recovery, in dementia, or in a chronic condition. This chronic condition, which is, so to speak, a quite peculiar mode of existence, may indeed sometimes resolve itself by a crisis, but it usually persists so long as no morbid modification has been wrought in the constitution. If in its essence mental alienation is a continuous affection, we still remark in the manifestation of its symptoms a kind of periodicity, which is often a precious indication in therapeutics. Remission, he says, is a frequent phenomenon; but he strenuously and at some length argues against the existence of *lucid intervals*. He observes, that in every disease, acute or chronic, as well as in the physiological condition, permanency of the manifestations is a very rare exception, and we are not to be astonished if for lucid intervals we are called upon to substitute remissions.

The author then passes on to the symptomatology of insanity. He discusses the usually received fundamental forms of insanity which are made to serve as the basis of systems of classification. Upon the subject of monomania he puts forth views not yet generally admitted, but which are every day receiving the support of new adherents. He contends that there is no such thing as a monomaniacal entity of which any particular act is the only pathognomonic sign. He refers to an essay published by him in the "*Annales Médico-Psychologiques*" in 1844, in which he demonstrated that homicide belonged to all the types of mental alienation, and that the homicidal monomania was an illusory entity, without foundation and without identity of character, when the act is considered as the only and fundamental symptom. Still, accepting the term monomania, with some modifications, he expresses his adherence to the classification of Esquirol.

Speaking of the *terminations* of insanity, he dwells with some minuteness upon the doctrine of crises. A crisis, he says, is either moral or physical, and often is of a mixed character. Again he follows Esquirol in contending that recovery is possible only by means of a crisis, not only pathological, but equally psycho-physiological; and that it is marked by a more or less gradual return of the normal physical and moral functions. We have not space to follow our author throughout his able exposition of the different critical phenomena. It is, however, one of the most interesting features of his work, inasmuch as it is from a close and correct observation of the physical and psychological critical phenomena that he seeks to derive his most valuable therapeutical indications.

The concluding chapter, one of great length, is devoted to the analysis of the four different types of mental alienation. These four types, the same that are recognised by Esquirol, constitute truly

distinct pathological entities. The elements of a differential diagnosis abound. The author here unfolds his reasons for limiting the application of the term monomania. The monomania of theft, of homicide, of suicide, of arson, erected into distinct entities, without precise pathological characters, and rejected by legal tribunals, have raised against true monomania, a reaction against which it is the author's study to contend. He refers to the writings of Foville and Falret, who appear almost to discard monomania altogether. "I. Frank, again, rejects monomania, and admits only two types, mania and dementia. He is thus driven to the subdivision of mania, and is obliged to admit that in chimerical mania the patients are so carried away by their chimera, that they regulate all their actions according to the part it enacts. In every other respect their reason is scarcely impaired; even more, in all that does not relate to their fixed idea, all the faculties of the soul are often healthy, and sometimes even excellent in part." M. Morel, attaching a very restricted meaning to the word monomania, and resting on the incomplete definition often given of this type, lays down as a principle the *physiological impossibility of an alienation bearing upon a determinate idea with an intact conservation of the reason of the individual on all other points*. He therefore, like I. Frank, rejects monomania as a type, and confounds it with mania, with which it becomes a variety under the name of *systematised mania*. But, although not sharing the ideas of M. Morel as to typical classification, he admits that the solidarity of the psychological functions is for him a fundamental principle, but contends that it is compatible with the admission of monomania as a type. M. Delasiauve maintains that the terms monomania and lypomania no longer satisfy the necessities of science, and convey no precise meaning. He comprises under the name of partial delirium a great order, having its varieties, amongst which, occupying the first place, is a true monomaniacal delirium, consisting in *the alteration of a sentiment or the predominance of a false conviction, compatible in every other point with the free exercise of the faculties*. M. Renaudin objects to this view, that besides the predominance of a particular sentiment, we must take into account the reaction of the sensibility, and not forget that activity or depression impart to this sentiment very different directions. It is for this reason that he is inclined to maintain the opinion which distinguishes monomania as much from mania as from lypomania. The author expresses himself of the same opinion as M. Baillarger. He praises the precision with which the physician of the Salpêtrière sets forth his opinion of the essentiality of monomania, which consists not only in the isolation of a delirious conception, but in the concentration of a series of dominant ideas, and in not changing its form, whatever

the accessory phenomena and the number and variety of the secondary false ideas. Its evolution comprises delirious conceptions, hallucinations, unwonted or uncontrollable impulses, either isolated or combined. Monomaniacs live in their delirium under the mask of the healthy mind; and monomania must so much the rather be admitted, because it is the fundamental type of insanity, and is connected less than the other forms with so-called organic lesions. To this M. Renaudin adds, that if the psychical element seems to predominate in monomania, it still only exists through the complementary influence of the somatic element; and if primitive organic alterations are rare, the functional dynamism is a powerful condition of causality upon which the varieties of evolution are based, from the instinctive impulse of material want, up to the ecstasy which is completely freed from all contest with this want.

The author then enters upon the discussion of the general and differential characters of monomania, chiefly resting upon the analogies existing between the state of reason and the pathological state. He cites several interesting cases to show that the first origin of monomania is sometimes detected in the somatic element, which may lead to the organization of a monomaniacal delirium prepared apart from the sentiment, but fully confirmed from the moment that this shares in the disorder. As to the ideas, he admits with Leuret that they are far from possessing in themselves a pathognomic character. Neither the idea nor the act, which are its sensible signs, constitute the disease which is in the domain of the sentiment. It is only upon this condition that we can diagnose monomania, not in its final result, but in its pathogenic mode. As to the diagnosis from lypemania, it is impossible to confound the sometimes ingenious comparisons of the lypemaniac, with the active reason, almost rising to inspiration, of the monomaniac. The lypemaniac shuns, eludes, avoids; the monomaniac goes forwards and becomes a creator. From whatever side, then, we regard the question of diagnosis, we find that it is resumed in the study of the evolution of the sentiment, and we discover the evident proof of the essentiality of a type which we have proposed to call *hyperphreny*, and for which we may without inconvenience preserve the name of monomania.

In studying the etiology of monomania, M. Renaudin observes that the evolution of monomania depends more upon groups of causes than upon special causes; and that in this type, as well as in the others, we must for the most part attach more importance to the conditions of causality than to the accidental circumstances which have coincided with the invasion or manifestation of the disease. If the hereditary transmission of mental alienation be a well-determined fact, the trans-

mission of the special form is far from being well established; and the author has known many families, the members of which presented every variety of the nosological scale. The indirect hereditary predisposition ought to be taken into more serious consideration. We often meet in the world with individuals who make themselves remarkable by their originality, their oddity, doing everything in opposition to other men, and having a peculiar manner of feeling and of expressing their sensations. The predominance of the personality regulates in them all the sentiments, and everything leads us to conclude that should insanity declare itself, it will take the form of monomania. It is in this that indirect hereditary predisposition consists, and is principally revealed by peculiarities of constitution, of character, of inclinations, the transmission of which cannot at the present time be doubted. But these elementary conditions of causality would often be without influence, if different circumstances did not arise to give them strength.

The nosology of monomania is then considered. It is not sufficient to diagnose a monomania to be satisfied that we have said all. Side by side with the general features, we have the individual features, and if each one is monomaniac after his own manner, we, nevertheless, observe different tendencies common to some, wanting in others, although all present the general impression of monomania. Hence the necessity of establishing certain important distinctions, not only in a nosological point of view, but also as regards legal medicine and therapeutics. The author then proceeds to relate a number of interesting cases, as illustrations of the different varieties of monomania. The first form described is ambitious monomania. He observes that the abuse of alcoholic liquors and good living is perhaps the most dangerous cause; in addition to the permanent surexcitation of the brain, this abuse entails a variety of affections in the different organs, and those of the heart are not the least frequent. It is especially this disorder of the circulation which has appeared to some physicians an indication for bleeding, a fatal practice, to which many cases of general paralysis must be attributed. Amongst the patients the author has seen, several have reached through this course to the belief that they were the Supreme Being. All had become incurable, because, in giving a too exclusive attention to the disorders of the circulation, alcoholic intoxication had not been sufficiently considered. Ambitious monomania has also sometimes broken out under the impression of direct physical causes, when it has not been possible to connect this form with any anterior disposition depending on the character or education.

Ambitious monomania, according to M. Renaudin, is daily becoming

more and more rare, although the number of the insane is far from having fallen off.

Religious monomania is the next in order. It is the prevailing sentiment which determines the character of the monomania, since it becomes the regulator and the motive power of this new existence. This existence moves henceforth in a circle of errors by the same processes which formerly placed it in relation with truth; and it is in order well to appreciate the different phases of this pathological condition, that we must distinguish in it three *moments*, which have a real importance, both in a medico-legal and a therapeutical relation. The sentiment becomes isolated in abstraction; it enslaves all the other sentiments, or confounds itself with them by yielding especially to the sentiment of personality; and lastly, in the third *moment*, the access of the prevailing sentiment is revealed by a negation of the others, that is, besides the transformations of the personality, we find also perversion of the affective element, or of some other. This truth, partially seen in studying ambitious monomania, is still more evident when we enter the sphere of religion. Here, as in the preceding form, it is less by the fundamental idea than by its applications, its evolution, and its sentimentality, that the delirious virtuality can be appreciated; for what is the idea enunciated by the religious monomaniac, of which the element cannot be discovered in the sacred writings? M. Renaudin relates in this chapter several remarkable examples of this form of mental alienation, in some of which, as in the case of Swedenborg, the hallucinations and delirious conceptions of the patient were received as sacred truths by persons not insane.

Affective monomania is then considered at some length, and its diagnosis determined according to the general principles laid down by the author.

The concluding part of this excellent work is occupied with an examination of some of the important medico-legal questions at issue between the professions of law and medicine. The author refutes with admirable force the doctrine of M. Molinier, the professor of law at Toulouse, who dwells upon the necessity of condemning the monomaniac, on the ground that society possesses no preventive measures with respect to him, and that it would be utterly without defence if it did not oppose to him repressive measures and the fear of punishment. According to M. Molinier, this fear is so efficacious and so salutary, that he attributes to it the triumph which some patients have obtained over their impulses, a triumph, which, M. Renaudin observes, can only be explained by the integrity of the will. The argument of M. Molinier is fundamentally the same as that often enunciated in our own courts of law; and is equally based upon an imperfect knowledge

of the varieties and essential characters of mental alienation. M. Renaudin's arguments in favour of medical *versus* legal interpretations and judgments in matters pertaining to mental diseases, may be summed up as follows:—

1. Mental alienation cannot be considered as being ever *partial*. It either is or is not: its type may vary as happens in ordinary diseases; and the more or less extensive sympathetic complications resulting from it depend upon the initial pathological conditions upon the appreciation of which rests the diagnosis of the affection.

2. Monomania is a delirium having characters peculiar to itself. It is built up from a pathological condition which, if it borrow much from anterior predispositions, constitutes from the time when it is organized a morbid idiosyncrasy subject to special laws, at the same time as to the ordinary physiological laws.

3. The idea does not constitute the delirium,—it is the expression of it,—and represents the delirious conceptions, which must be judged not only in their relations with the primitive virtualities, but especially with the pathological element with which they are associated.

4. It is in this only that resides the *criterium* of their influence upon the determinations which reveal themselves, either by restriction or extension. The delirious conceptions may by a certain sentimental elaboration aggravate the initial pathological state, but it is commonly in the exacerbations of the latter that they produce their extreme consequences, and during its remissions sometimes only the obscure virtuality remains. It is, therefore, not by the characters of the period of remission that monomaniacs can be judged.

5. Monomania being not a passion, but a well-established pathological condition, the acts committed under its influence cannot constitute a punishable infraction, whatever appearances of discernment may exist. The loss of the will may perfectly well be conciliated with the consciousness of this loss; and it must not be lost sight of that the bases upon which the apparent discernment of the monomaniac is exercised, differ from those upon which common reason reposes.

6. The tribunals must therefore seek in the reports of physicians not only for information as to physiological and pathological facts, but also for the legal appreciation of the psychological value; and from the moment that mental alienation is established, whether it assume the monomaniacal type or any other, moral irresponsibility is the necessary consequence.

We have now glanced at most of the leading topics of M. Renaudin's first series of *Études*, preserving very closely the order in which they have been taken up and developed by the author. Many inte-

resting facts and arguments, having a more or less immediate bearing upon the subject actually under consideration, are dispersed throughout the book. Most of these we have necessarily passed over. We are tempted, however, to bring together some observations upon the effect of isolation on the mind, and on the influence of the cellular system in the treatment of insanity, on account of the great practical importance of the question in the construction and regulation of asylums and prisons.

Every individual who isolates himself is very near the confines of insanity, either by going beyond the ideas of the times, when he loses himself in the uncertain, or by exaggerating his individualism, when he opposes his isolated strength in open conflict with the collective force. Beneath the weight of these influences many succumb. The moral sense must be wonderfully developed that can elude this catastrophe; and we well know that it is the exception. It is in the isolation of this force that lies the first step to mental alienation. . . . Many insane patients are incoherent only when left to themselves. Many individuals keep in the straight path so long as they are supported in it. This is also the history of collective unities, and even of nations which, abandoned without a guide, present the spectacle of the most complete incoherence, or raise themselves to the sublime when a powerful and enlightened authority directs them. M. Renaudin relates the case of a patient who evinced a constant regret for the period when his confinement in a cell was attended by a more rigorous coercion. It was at this period, he says, that his power was greatest, most unlimited. *We should all have been saved if I had remained there*, he says. In proportion as his dwelling has been improved, his power has declined, and he is become the more docile by being allowed a larger measure of liberty. This remark cannot be lost sight of when the question of cells in asylums is considered. When cells were abandoned, all our patients, like the one referred to, lost the power which stimulated their excitation, and we are thus supplied with the solution of the most important problem in the organization of an asylum.

With these passages we must conclude our analysis of M. Renaudin's present series of essays. We cannot better show the high opinion we have formed of their merit, and of the instruction they convey upon some of the most initial, and therefore most difficult and important questions in medico-psychology, than by expressing an earnest hope that the author will not long defer the fulfilment of his promise to publish a continuation of his researches.

ART. IV.—ON EPILEPSY.

(Continued from page 51.)

VII. *How is Epilepsy distinguished from other Affections?*—The characters of epilepsy are in general so well marked and distinctive that there is no difficulty in the diagnosis. It may be confounded with eclampsia, of which it may be considered a chronic form—its termination, or recurrence as a chronic affection, will sufficiently distinguish it. From hysteria, epilepsy is distinguished by the total loss of consciousness during the attack, which is never met with in hysterical patients, and by the more *regular* convulsive action in hysteria, by its mode of accession, and by the circumstances as to age, sex, &c., of the patient.

In apoplexy, there is little or no convulsion, and though there is complete unconsciousness, there is none of that embarrassment of the circulation and respiration, which is so characteristic of the epileptic seizure. For the distinction between epilepsy and the simulated affection, we refer to systematic writers on the subject; sensibility to pain, or the action of the pupil when exposed to sudden light, will in general be sufficient tests.

VIII. *Prognosis.*—From what has been already stated, it will readily be concluded that the prognosis of epilepsy is most serious, and fully justifies the forcible remarks of Georget: “Epilepsy is one of the most horrible of diseases, it shortens life, it kills occasionally in one attack, it finishes ordinarily by degrading and annihilating the intellect, it excludes the sufferer from society, and renders his life insupportable.” The opinions given upon its curability are most strikingly at variance with each other, even from the highest authorities. We will quote a few of these by way of illustration.

Hippocrates recognises its curability under these limitations:—“Whoever is acquainted with such a change in men, and can render a man humid and dry, hot and cold by regimen, could also cure this disease, if he recognises the proper season for administering his remedies.” Aretæus considers that when once firmly fixed and rooted in the system, it lives with the patient, and only dies with him.

Paulus Ægineta considers it susceptible of cure, without drawing the distinction between centric and excentric epilepsy. Of moderns, Maisonneuve considers its resistance to treatment almost insurmountable; Pinel gives a guarded and doubtful opinion; Hufeland says:—“the prognosis is sad, and the disease difficult to cure,—the curability is in the proportion of one to twenty—the immediate mortality is rare.” Chomel considers medicine as “almost always powerless” in curing epilepsy. It is proper to observe here, that these remarks refer

chiefly to centric or cerebral epilepsy. Portal considers epilepsy one of those diseases which is the most rarely cured, but that more success attends the treatment than is generally supposed. M. Foville concludes that by a careful attention to causes, great success might be hoped for in a majority of cases. M. Esquirol, a very high authority, after stating his endeavours at the Salpêtrière, and their occasional results in suspending the attacks, adds:—

“Plusieurs de nos épileptiques se sont prêtées à mes essais plusieurs années; mais, l'avouerai-je! je n'ai pu obtenir de guérison.”

He considers the suspension of the attacks in most cases to be due to the mental excitement of trying new means of cure or of consulting a new physician, and concludes that epilepsy is rarely curable. Of the reported cures, he considers some to be hysteria, and others to be mere suspensions of the attacks, the patients being lost sight of.

Henry asserts that the cure of epilepsy ought to be regarded as an extremely rare exception, and that epilepsy complicated with insanity is never cured.

M. Lelut, at the Salpêtrière, and M. Delasiauve, at the Bicêtre, disbelieve altogether in the curability of epilepsy, and consider the attempt as “le desespoir de la médecine.”

On the other hand M. De la Rive thinks epilepsy curable by nitrate of silver in most cases, whilst M. Foville speaks in terms of the strongest reprobation of it; and M. Debreyne thinks it curable by extract of belladonna, whilst others of high authority consider it quite useless.

M. Herpin gives the particulars of sixty-eight cases analysed with great care, from which he draws the following inferences as to the general prognosis:—

1. That epilepsy is not generally spontaneously cured by the efforts of nature alone, though this may occur in one-twentieth of the cases observed.

2. That treatment appears to produce a beneficial result in three-fourths of those treated: that a cure may be expected in half, and great amelioration in about one-fifth.

3. That about one-fourth of the cases are incurable.

This summary would be more valuable, if the distinction we have so frequently mentioned had been kept in mind—viz., between the centric or cerebral and the excentric or symptomatic epilepsy. How are we to reconcile such contradictory evidence? and to what conclusions are we to come?

For the extremely unfavourable judgment given by Monneret and Fleury, Delasiauve, Esquirol, and Lelut, we may partly account, inasmuch as their experience was probably chiefly amongst old and con-

firmed cases, and such as were complicated in most instances with mental affections, at the Salpêtrière and Bicêtre — and such cases, we have before stated to be nearly if not altogether incurable. It is more than probable that all these would be cases of *epilepsia centrica vel cerebialis*.

On the other hand, M. Herpin's calculations, and those of many of the others, are founded upon private experience, or the practice of such hospitals as receive cases more promiscuously than the above, and where there would consequently be a great proportion of the more frequently occurring cases, those of *epilepsia eccentrica vel sympathetica*; and in this we have a key to the varying accounts.

A reconsideration of the phenomena will assist us again in forming a rational prognosis. A person of 20 years old, in the enjoyment of apparently perfect health, is seized with a series of epileptic fits, but in the intervals, the health is good, the intellect sound and vigorous, the muscular system unimpaired, and the functions generally performed properly; and we can trace no deformity of cranium, or other indication of malformation. We conclude, or hope to find, this to be a case of *excentric* or *symptomatic* epilepsy, dependent upon some functional disorder; and, seeing that in such a subject, there are times when the functions are so co-ordinated as to be compatible with perfect health, we have reason to hope that by a judicious use of hygienic and therapeutic agents, this state may be attained and permanently preserved. And as a general rule, we may state with regard to symptomatic epilepsy, that it is curable in so far as the source of irritation is capable of relief or removal, and in proportion to the care and skill brought to bear upon the exciting functional disorder. And thus we may hope, with care, to cure the majority of such cases, and to benefit many more. And what of the *centric* or *cerebral* epilepsy? The same general rule of prognosis will apply, but with restrictions. There is evidently a condition of the functions compatible with health; and a careful observation of the precise energy of each function *during health*, combined with judicious attempts to preserve them in that state, will not fail greatly to diminish the number and violence of the attacks, even though perfect success may not attend our efforts. So far these remarks apply to the general prognosis of the disease; when we wish to form an opinion upon any individual case, we have many other circumstances to take into account.

The hereditary tendency to the disease is an unfavourable sign, as indicating the probability of its being *E. centrica*. *Sex* appears to exert some little influence upon the curability of epilepsy—women are more liable to the attack, but more easily cured. The most favourable age for the first attack, as regards curability, is from 10 to 20. Long

duration of the disease is evidently conducive to an unfavourable judgment. M. Herpin holds an opinion very strongly, that the curability or obstinacy of epilepsy may be predicated with considerable certainty from the number of attacks already experienced. We give his conclusions, but offer no opinion upon them:—

“A cure may be assured almost certainly to patients who have only the ‘*petit mal*,’ who have it not very frequently, and with whom it has not lasted above 10 years.

“In the ordinary attacks the prognosis is *favourable* if they have not exceeded 100.

“The chances of success are less between 100 and 500.

“The prognosis is extremely unfavourable when the attacks have exceeded 500.”

We cannot conclude this branch of the subject without referring to the aphorisms of M. Esquirol on the subject of epilepsy:—

1. “Epilepsy is a long and dangerous disease; rarely fatal in the first attack.” 2. “When hereditary, it is rarely curable.” 3. “Symptomatic epilepsy is more easily cured than the centric form, though this last is not always incurable.” 4. “Sometimes epilepsy disappears for many years, to re-appear without any known cause.” 5. “Those attacked soon after birth, are rarely cured; if puberty has not the effect, they remain incurable.” 6. “Those attacked between 3 and 4 years are generally curable, if treated in time.” 7. “Those attacked just before puberty are cured on the completion of the crisis.” 8. “Marriage only cures genital epilepsy; it aggravates other species.” 9. “A pregnant woman, who becomes epileptic, runs very great risk.” 10. “When the crises increase in frequency and intensity, death is probably imminent.” 11. “Death does not take place during the horror of the convulsions, but the period of the depression afterwards.” 12. “Epilepsy complicated with mental alienation *is never cured*.”

IX. *The Treatment of Epilepsy*.—Fifty years ago, it appears that the remedies for epilepsy were so numerous as to occupy 150 quarto pages of the “*Analecta Literaria Epilepsiam Spectantia*,”—they have since multiplied—it is utterly impossible to give even the briefest analysis of them. One author vaunts belladonna as almost invariably successful; another, after a fair trial, pronounces it worthless. The same is the case with valerian. Dr. Heim pronounces *nitrate of silver* to be the most effectual remedy he has found in an extensive practice of sixty years. M. Herpin upholds *oxyde of zinc* as the most valuable of all remedies. M. Foville speaks in terms of the *strongest reprobation* of the use of *both* these remedial agents, and all *metallic oxydes*.

The weight of testimony amongst reputable authors is quite against the use of *specifics*; and indeed, it seems but rational to suppose, that if epilepsy depends upon a disorder of the stomach, it will not be

materially benefited by valerian, — or if upon the liver, that nitrate of silver will not be of service, and so for the rest.

In default of a rational system of treatment, the most extraordinary and heterogeneous matters have been forced upon the unfortunate stomachs of the already sufficiently unfortunate patients—they are too disgusting even to enumerate. After a short catalogue of these, Dr. Cheyne remarks:—

“There are other abominations of the same kind, unnecessary to specify, the use of which, Erastus alleges, was taught to mankind by the devil; but without calling in question the active malignity of our great enemy, we are of opinion that man, when left to his own inventions, is fully equal to the discovery of these and a multitude of other therapeutic agents of equal ineptitude.” (Cyc. of Pract. Med., Art. Epilepsy.)

We believe that the true principles of treatment are to be sought, as we have indicated under the head of prognosis, in observation of that state of co-ordination of the functions which is compatible with health during the intervals—and in the attempt to preserve this co-ordination, whilst by the use of stimulants and tonics, we endeavour to raise the whole tone and energy of their performance.

Dr. Radcliffe's remarks on treatment indicate as strongly the eminently practical physician, as his investigations into the pathology of the affection show the philosopher and earnest searcher after truth. We can but refer our readers to his volume, our limits only permitting us to indicate the principles of treatment without details.

We must first aim at *correcting disordered function*—we must treat epilepsy according to its seat, when this is discoverable. For full details on this head, we refer to Dr. Cheyne's excellent article in the “Cyclopædia of Practical Medicine,” more than once alluded to. The nutritive functions especially must be attended to, as to their regulation, and in reference to diet. On this last subject, as many differences of opinion exist as on the remedies to be employed. Fothergill, Abercrombie, and others of great weight, advise total abstinence from animal food and from all fermented liquor: Heberden relates cases cured by such means. Dr. Radcliffe, in accordance with that plan of treatment which has generally been found successful—viz., the tonic, advises abundant animal food, and a moderate allowance of stimulant. But all this must be regulated according to the condition and digestive powers of the patient—generally a mild, digestible, nutritious diet, with some form of stimulant, will be required. Exercise, short of fatigue, is always proper, and all hygienic methods in short, which will tend to the proper co-ordination of the functions. At the same time, we must attend to what has been very properly called, mental dietetics.

The influence of the mind is so strong as frequently to suspend the fits for some time—a new physician, or a new remedy has almost constantly this effect. It is only necessary to indicate this,—the particular method of application must suggest itself in the individual case. The precautions which must be taken in all cases against immediate personal injury during the fit, are too obvious to require notice

We believe that by correcting disordered function, and by supporting the strength, and employing (but not over-employing) the mind, most cases of sympathetic epilepsy are curable, or susceptible of great relief. In the centric epilepsy, we must pursue the same system with, if possible, still more rigorous exactness,—but when these means fail, as they too frequently will, the temptation is irresistible to try some of the so-called specifics. The strongest, and perhaps in many instances the most effective, are the powerful mineral tonics—nitrate of silver, sulphate and ammonio-sulphate of copper, sulphate of zinc—these in almost incredible doses have been given, and apparently with good results; the oxyde of zinc in from one to five or ten grains, repeated from twice to six times daily, for weeks together, is spoken of with great favour by M. Herpin, and his results, fairly stated, are such as certainly recommend it to great attention. Of vegetable substances, the valerian, powdered root, in doses of from half a drachm to three drachms daily, is the most recommended. But on the subject of special remedies, we must refer to the various monographs and systematic works on epilepsy. We have little or no dependence on any treatment but such as is comprised in such indications as regulating disordered function—increasing tone and energy—and a proper attention to bodily and mental dietetics. Bleeding in any form is, as a rule, worse than useless. Setons, moxas, blisters, issues, may occasionally in old confirmed cases be productive of some relief, but we have not much to say in their favour.

But what of Dr. Marshall Hall's late panacea?

"With regard to tracheotomy," says, Dr. Radcliffe, "it is less easy to come to an opinion, and this the more as there is an insufficiency of evidence on the subject. Still it is clear that it does not fulfil all the original expectations of Dr. Marshall Hall concerning it. It does not prevent convulsion; it does not always, or even usually, make the convulsion slighter. It does not prevent danger; for of the few patients upon whom the operation has been performed, three have died either in the fit or in connexion with the fit; and of the three, the opening of the windpipe was free from all obstruction—at least in one. Under these circumstances, it becomes a question whether the benefits of the operation are sufficient to counterbalance the associated inconveniences and dangers even where (what rarely happens) the asphyxial symptoms are consequent upon spasmodic closure of the larynx; and this question must remain in abeyance for the present" (p. 133).

Now this is mincing the matter too much, for we hold that there is nothing in the pathology of the disorder, and scarcely more in the empiricism of experience, to justify the practice of making an additional vent-hole in the windpipe of the epileptic, seeing that, apart from the question of danger, the inevitable effect of this vent-hole, while it continues open, is to convert the possessor of it into "a dumb whistling wretch, whose every breath is an annoyance to himself and others." What is the real value of clinical evidence in this case has, we think, been shown by Dr. Radcliffe himself, in a paper read by him before the Medical Society of London, and reported in the *Lancet* for May 14, 1853; and we know of no new cases which require us to alter this opinion. These later cases may or may not be more favourable than the earlier, but one thing is certain—that one of their number—three or four in all—has died in the fit. For our own part, we have never been able to conquer the suspicion that all these cases, when their history is fully known, will turn out to be no more satisfactory than the two which are first in the series, and upon which Dr. Hall has dogmatized most loudly. We turn to Dr. Radcliffe's paper before mentioned for the particulars, and the natural comments upon them :—

"*Mr. Cane's Case.*—The patient was a boatman, aged twenty-four, who had been epileptic for seven or eight years. The fits were severe and frequent. The operation was performed during a fit, in consequence of a state of asphyxial coma that had lasted nineteen hours. The relief was immediate, and no fits have followed the operation. The habits of the patient were very irregular and intemperate, and he was discharged from his employment on this account about ten months ago. The tube is still worn, and curiously enough, it is worn with a cork in the opening.

"*Mr. Anderson's Case.*—The patient in this case was a stout, thick-set, muscular female, aged thirty-six, the daughter of an epileptic father, and herself epileptic for twenty-four years. Her complexion was ruined by the former use of nitrate of silver. The operation was performed in March, 1851, and the tube was worn until her death, which happened in a fit, about four months ago. After the operation the fits continued as before—possibly a little less frequently and severely, but decidedly of the same character. Her health and spirits also are said to have undergone some slight improvement, and she lost a numbness in her right arm, which had previously distressed her; but those who knew her best doubt the existence of any appreciable change of this kind until about two or three months before her death—sixteen months after the operation. The following notes of the final seizure are from Mr. Anderson :—'Eight A.M.: Had been up and dressed; heard to fall heavily. A woman removed the inner tube from the trachea, as she was in a fit apparently more severe than usual. She 'snorted loudly;' nails of a deeper colour. She was placed on the bed, as the woman thought she would recover as usual.' The

woman here referred to says the patient was black in the face and violently convulsed, and that death must have taken place within ten minutes. The body was examined twenty-four hours after death, and the following are the particulars supplied by Mr. Anderson: 'Body extremely muscular; rigidity still present; not much fat. Head: vessels of scalp much congested; skull thick, and dura mater so universally adherent that the skull-cap could not be removed until the dura mater was divided. The sinuses were filled with dark blood, and on the removal of the brain an unusual quantity of dark blood flowed from the spinal canal. On either side of the longitudinal sinus, and on the inner side of the frontal bone, two or three growths of bone were found, and to these the dura mater was so firmly adherent that on attempting to separate it, it was torn through and portions remained attached. The largest of the exostoses was about an inch and a half in circumference, and projected about half an inch from the surface of the bone. No alteration was observed in the corresponding portion of the cerebrum. The brain was softer than natural, and the puncta were more than usually distinct. There was little fluid in the ventricles, but the choroid plexuses were congested. Lungs: These organs were collapsed, occupying but little more than a third of the thoracic cavity, and somewhat congested at their posterior margin; structure healthy. Heart: Larger than usual (perhaps a fourth); cavities, especially the left, distended with blood; it was surrounded with fat, and its structure flabby; valves healthy. Liver, kidneys, and spleen, highly congested. Uterus natural, but cysts containing viscid fluid in the ovaries. Small intestines (especially lower part of the ilium) congested, and the mesenteric glands enlarged. Internal jugular, above the level of the omohyoid, almost empty.' * * * * *

"What of Mr. Cane's case? Here undoubtedly the results seem most marked, but do they not prove too much? There are no fits whatever after the operation, and this is not to be expected, even on Dr. Hall's own premises. Moreover, fits do happen in all the other cases, and in some of them very severe fits, and this fact gives a probability of at least seven to one that the fits in this case did not keep away in consequence of the operation. It is to be remembered also that the wearing of the cork in the tracheal tube did, in fact, place the patient in the same predicament as that in which he was before the windpipe was opened. Why the fits kept away it is not necessary to inquire, for nothing is more certain than that epilepsy may suddenly disappear and keep away for a long time without any apparent cause.

"What of Mr. Anderson's case? Here the main questions are as to the character of the fits, the state of the general health, and the cause of death. Were the fits improved in character? Possibly, but not probably. Dr. Marshall Hall, in his lectures at the College of Physicians, allowed that a fit had followed very shortly after the operation, in which the tongue was bitten. A Mrs. Dwellie, living in the adjoining garret to the patient's, and who frequently went to the patient's assistance when she heard the noise and struggle of the fit, states explicitly that the convulsions were as frequent and violent, and the subsequent torpor as prolonged after the operation as before it.

A Mrs. Smith, also, an aunt of the patient, who had known her from childhood, and who saw her several times a week during the whole of her life, makes the same statement. Miss Lewis, on the contrary, who lives on the first floor of the house in the garret of which the patient lived, thinks the fits, after the operation, were not so severe or frequent as before it; but why she thinks so is not very evident. She saw her in but few fits, and in none (there is reason to believe) from the commencement. Indeed, it is to be understood that this witness was infirm and half crippled, and often quite an invalid; that she had to be fetched from the top of the house, and then to mount up two flights of stairs before she could get to the place where the patient was; so that the fit must have been far from its commencement before she could see it. The last fit, also, which was evidently of great violence, is spoken of only as 'apparently more severe than usual,' showing that the ordinary fits were severe; and the patient was 'expected to recover as usual,' showing that death occurred unexpectedly in what was regarded as an ordinary fit. Concerning the state of the general health, there are two opinions. Miss Lewis says this was better: Mrs. Dwellie and Mrs. Smith say there was no perceptible improvement until within two or three months of her death, fifteen or sixteen months after the operation. The cause of death is very obscure. It could not be, however, from the strangulation of laryngismus, for the inner tube was removed at the beginning of the last fit, as it was in all the fits in which the patient was watched. Indeed, there was never any neglect or mismanagement about the tube (which reflects the highest credit on Mr. Anderson's mechanical ingenuity), and the patient herself had so schooled herself to it that she could remove and cleanse it, and did so remove and cleanse it, many times a day. The fatty state of the heart, as Dr. Hall supposes, might have had something to do with death, for death happened shortly after the commencement of the seizure; but, on the other hand, it is not to be forgotten that there was stertorous breathing, blackness and turgescence of the head and neck, with distended sinuses, distinct cerebral puncta, and other signs showing that death might have been caused by coma."

To us these cases have almost a ludicrous aspect. The one corks his vent-hole, and, in spite of the theory, is henceforth free from fits; the other is most careful to keep her vent-hole free, and when she is unable to do this herself, others do it for her, and yet her fits continue as before, and forsooth, she must die in one—not a fit of syncopal epilepsy, as Dr. Hall would fain persuade himself and others, but a fit of genuine unmistakeable asphyxial epilepsy. How, with these cases to begin with, Dr. Hall should have continued to advocate his pet theory, passes our comprehension.

In the attack itself our conduct is expectant and precautionary—the endeavours should chiefly be directed to the prevention of physical injury, and to obviating the strong tendency to asphyxia; but we cannot approve of tracheotomy as a resource with this view. Any attempt at internal treatment is unsuccessful. Should the attack con-

tinue long, heat and stimulants may be applied to the epigastrium, abdomen, and legs. If there be premonitory signs, the fit may not unfrequently be prevented entirely, by the administration of an emetic, a purgative, or, as Dr. Radcliffe has observed, in some cases, by a stimulant, as a glass of wine. The choice must be made between those according to the circumstances of the individual case.

We regret that our limits compel us to be thus fragmentary in our hints on treatment. We leave the subject with a firm persuasion that much may still be done in this intractable disease, by a careful application of a rational system of treatment, founded upon the principles laid down—and with a full conviction that earnest observation and patient inquiry will, in this and all other sciences, compel nature to an answer, and ultimately force her to reward her faithful votaries by the revelation of her long-cherished secrets.

Since the preceding article has been in print we have received M. Delasiauve's recent treatise on Epilepsy, and this we will now proceed to notice in a sequel, rather than that our readers should not be at once acquainted with it.

The position occupied by this author, the numerous cases upon which his observations are founded, and the evident care and pains adopted to obtain correct deductions from accurate observations, make the statements contained in this work of great value—and even those from which we are compelled to dissent have their own peculiar worth in another respect, which we shall afterwards notice.

The first point worthy of specification is with regard to the *division* of epileptic attacks into the major and minor kinds. One author very properly and accurately defines the differences between the slightest possible kind (absence), the second (vertige), the third (accès intermédiaires), and the fourth (chutes—attaques ou accès complets). The symptoms are well drawn, but we think that it is an error to consider the last form alone as the type of the disease when confirmed and fully established. We have seen already, that in some cases (the number bearing a very appreciable relation to the whole) there are *only* the incomplete attacks or vertiges; no convulsions, or only such as are very slight, occurring; and that these, so far from being, as our author terms them, but “shadows and abortions” of the full attack, are followed even more quickly and certainly than the convulsive attacks, by those systemic derangements and those mental degradations which are amongst the most fearful of the consequences of epilepsy. Dr. Delasiauve does not appear to recognise this as essentially true, yet as seen above, high authority is very positive on the point.

Our author lays much stress on the duration of the complete attack, limiting it to a minimum of two minutes and a maximum of five.

Our own experience is very much at variance with this, as we have known many instances where the attack has lasted for hours, even taking the indication of its termination, as pointed out in the work before us, at the moment when the respiration recovers its freedom. Two cases have come under our immediate care recently, which illustrate this point. One, which was epilepsy of eleven years' standing, had fits varying from one minute to several hours, and the final attack, which was fatal, lasted above twelve hours. In all these there was the most severe embarrassment of the respiration. In the second case, which still survives, the last attack which we witnessed lasted four hours and a half, the convulsions all this time being violent, and the respiration so very much impeded, that even the desperate resource of tracheotomy was entertained, though ultimately dispensed with.

The researches into the precursory symptoms are very valuable; our author finds them to be much more numerous than are generally supposed; in fact, that the attacks *with* premonitory signs are about one third more numerous than those occurring without any warning immediate or remote. In 264 carefully observed cases he found immediate precursory symptoms in 150 cases, and remote signs in 35. Another interesting point mentioned is, that occasionally these premonitions have been *objective* exclusively; that is, they have been unnoticed by the patient, but evident to the bystanders.

We have already given the very vague and varying statistics of these warning signs; we would urge this as a point especially deserving of attention on all who are interested in the study of this affection, inasmuch as we are convinced that close observation will *most frequently* detect some change, which may serve as a shadow of the coming event, and also that the recognition of such changes, and the instant adoption of such therapeutic or hygienic applications as they may seem to indicate, will be most important agents in the prevention and ultimate cure of the attacks, and most especially in those cases where we do not suspect organic mischief, but where *an evil habit* of system requires breaking off.

With regard to *periodicity*; it is recognised as feebly marked in some few cases, and in some others as indicating the type of intermittent fever, and then becoming a useful guide to treatment. The following table as to the recurrence of the fits is interesting:—

Fits almost daily in	9 cases
„ in from 2 to 6 days	42 „
„ once a week	20 „
„ 10 to 15 days	9 „
„ 15 to 30 days	9 „
„ with very irregular intervals,	21 „

To make these statistics more complete, we add a table of the results obtained by M. Herpin, M. Beau, and M. Leuret, for convenience of comparison all reduced to the proportions of 100.

	Herpin.	Beau.	Leuret.
One or more attacks daily in	22	10	2
One to six in the week „	36	25	32
One to four in the month „	16	45	59
One to eleven in the year „	26	20	7
	<hr/> 100	<hr/> 100	<hr/> 100

With regard to anatomical lesions, Dr. Delasiauve adds to our stock of observations, but, as he confesses, little to our knowledge of the disease derived from thence. In 95 cases he found important lesions in 43, equivocal lesions in 31, and a total absence of lesion in 21; and he concludes with regret that we do not yet know, nor even suspect the true seat of epilepsy.

But one of the most important points which we have to notice, is the hereditary transmission of epilepsy, in reference to which we find some extraordinary data in the work before us. We have seen above, that in a great majority of the instances tabularized by M. Herpin, there were indications of a family tendency either to epilepsy or to some disease of the nervous centres, or at least to some considerable functional disturbances.

Thus in 68 cases, slightly to recapitulate, he meets with 10 cases of ancestral epilepsy, 24 of mental alienation, 11 of apoplexy with hemiplegia, and 13 of chronic meningitis and hydrocephalus. We must, however, bear in mind that these were not all in separate individuals, and therefore the proportion of ancestral affections is not quite so large as from a cursory glance it would appear. Yet, even making every allowance, how different is this statement from the results indicated in the following table! Out of 300 cases there was

Absence of hereditary indications in	167 cases
Positive declaration of non-existence of such indications in	} 120 „
Existence of epilepsy in relations in	
Nervous and cerebral affections in	5 „
	6 „
	<hr/> 300

Perhaps this striking difference may be in part accounted for, by taking into consideration that these 300 cases were hospital patients, in whom, for obvious reasons, the difficulties attendant upon eliciting information are very much greater than in private practice. There is also an irresistible tendency to conceal facts bearing upon this question.

But making all possible allowances, we find most startling discrepancies in the writings of various authors on this branch of the subject—these and other differences we shall have again briefly to allude to in the sequel.

We do not find much additional light thrown upon the already discordant views of the influence of menstruation and pregnancy, on either the development or the progress of the disease. With regard to solitary vice, Dr. Delasiauve gives it a more prominent causative place than most authors—thus, MM. Bouchet and Casanville attribute epilepsy to this cause in 3 out of 77 cases; M. Beau, in only 1 in 273; M. Herpin in 1 in 27; Dr. Delasiauve gives 25 in 200 as the proportion M. Leuret alone exceeds this calculation, 12 in 67 being the relative numbers. It must, however, be always impossible to calculate the precise influence which a vice so general has upon any given disease; but that it has a striking and powerful influence, by reducing the general powers, and by exaggerating irritable mobility, cannot be doubted.

With respect to treatment, we find nothing especially new; tonics appear to enjoy less favour, and sedatives somewhat more, than we have been inclined to accord to them. The effects of the preparations of copper are “isolated, slow, and suspicious;”—nitrate of silver almost useless—sulphate of quinine not answering the expectations formed of it. Valerian, assafoetida, artemisia, and camphor, are spoken very highly of, the latter being of use, chiefly indirectly, through its aphrodisaic action. Ammonia is of much service.

The earnest and sincere searcher after truth for its own sake, has no more distinguishing characteristic than that total and absolute self-negation, which ever and again leads him to distrust himself rather than nature, to relinquish theory rather than to neglect or warp fact and observation. When convicted of error, instead of mortification that he is wrong, he finds matter of congratulation and rejoicing that there is still another chance, by rigid observation and rectification of error to discover the truth of the secret which has so long eluded him. He perceives that still the mystery is *not demonstrated* to be unfathomable, since the *most* accurate means have not yet been taken to elucidate it. Such is the foundation of our hope, that yet we may have light shed upon the obscure subject of our essay. We have seen that the significance of symptoms is mistaken,—that the varieties of disease are doubtful,—that the pathological and anatomical conditions are involved in mystery,—that the causes are obscure in their operation and their efficiency,—that the prognosis is not agreed upon,—that the treatment is empirical. Yet we have hopes for a better state of things,

for do we not see plainly that observation, accurate and untheorizing, is yet deficient? This is sufficiently answered by the varying accounts which are given by different authors of simple matters of fact. A better state of things *is* arising; observations, honest and sincere, *are* multiplying and accumulating, but "non tantum numerandæ sunt, sed etiam perpendendæ observationes," we must have facts well weighed and well observed, and in sufficient numbers—then, and then only, shall we be in condition aptly to interrogate nature as to her meaning.

We cannot better conclude our remarks than by the closing paragraph of M. Herpin's introductory chapter:—

"Of the hundred thousand physicians who practise their art in Europe, let but one tenth—one hundredth, devote but a minute fraction of their time, to observe conscientiously, to note exactly, and to review methodically, the results; * * * * and it will require comparatively but a few years to elevate a magnificent monument which neither the efforts of sectaries nor the wear of ages can injure. Each generation will add to it its own work, but it will respect that of its predecessors, and the edifice will gain in grandeur, and lose nothing of its solidity or harmony of proportion."

CRITICAL REMARKS ON THE "PLEA OF INSANITY," &c.

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"NEXT after minors," says Baron Hume, commencing this portion of his justly esteemed work, "we may attend to the case of those unfortunate persons who have to plead the more miserable defence of idiocy or madness, which, if it is not pretended, but genuine, and is withal of the due degree, and is fully proved, brings the act to be the same as that of an infant, and has equally the privilege in all cases of an entire exemption from any manner of pain; *Cum alterum innocentia concilii tuetur, alterum fusi infelicitas excusat.* (L. 12 ad Legem Corneliam de Sicariis.)"

Observe—if *genuine*—of the *due degree*—and *fully proved*—implying serious obstacles in the way of sufficient legal excuse; and these are specially enforced—more particularly on one main point. "I say," continues Baron H., "where it is fully proved, and is of the due degree: For if reason and humanity enforce the plea in these circumstances, it is no less necessary to observe such a caution and temperament in the application of it, as shall hinder it to be understood that there is any privilege of mere weakness of intellect, or of a strange and moody humour, or of a crazy and capricious or irregular temper and habit"—the Commentator expressly declaring, "*None of these things*"—namely, "mere weakness of intellect," "a strange and moody humour," "a crazy and capricious or irregular temper and habit"—"*either are or ought to be law.*" In plain words, weakness of intellect, with the adjuncts enumerated; can form no defence in the eye of law, which, according to Hume, speaking decidedly as an authority, is in this matter consistent with reason and humanity.

We shall see how he endeavours to make out a position equally desirable and important. "Because," are his words, referring to the peculiarities mentioned, "such constitutions are neither exclusive of a competent understanding of the true state of the circumstances in which the deed is done, nor of the subsistence of some steady evil passion, grounded in that situation, and directed to a certain object. To serve the purpose, therefore, of an excuse in law, the disorder must amount to absolute alienation of reason, '*ut continua mentis alienatione, omni intellectu careat*'—such a disease which deprives the patient of the knowledge of things about him, and of the discernment of friend from foe, and gives him up to the impulse of his own distempered fancy, divested of all self-government or control of his passions"—absolute alienation of reason—the want of all intellect—the subversion of every faculty to perceive the plainest distinctions among persons and things—a total surrender to imagination unguided and unchecked by judgment—the unmodified supremacy of animal propensities. These alone, according to Hume, and in his phraseology, are and ought to be law—that is, constitute the due degree of insanity required—and which should be required—by law, in order to "the privilege of an entire exemption from any manner of pain"—or to realize the maxim "*futi infelicitas excusat.*"

Taking for a moment this view of the state of a patient reckoned not amenable to penalties, and seeing that nothing short of it is held adequate to exemption, one might think it rather strange that Hume immediately afterwards expresses a doubt "whether it should be added to the description, that he must have lost all knowledge of good and evil, right and wrong;" and, farther, to find the admission, that "this is a more delicate question, and fit perhaps to be resolved differently, according to the sense in which it is understood." But, in the first place, let us see how two or more differences in the meaning of the question are made out. "If," says Hume, "it be put in this sense, in a case, for instance, of murder—Did the pannel know that murder was a crime? Would he have answered on the question, that it was wrong to kill a neighbour? This is hardly to be reputed a just criterion of such a soundness as ought to make a man accountable in law for his actions. Because it may happen a person to answer in this way, who yet is so absolutely mad as to have lost all true observation of facts, all understanding of the good or evil intentions of those who are about him, or even the knowledge of their persons." This is the first sense, according to Hume, then, in which the question may be put respecting the *admissible* insanity of the individual; and it follows, from the *quasi* answers supposed, that, though labouring under "absolute alienation of reason," a deprivation "of the knowledge of the true position of things about him," and of "the discernment of friend from foe," he may nevertheless be able correctly to answer—of course, to understand—certain questions both in morality and in law; or, in other words, it follows, that "absolute alienation of reason," &c., is not essential to the requirement of law, namely, that insanity, in order to be effectual as a bar against penalties, must amount to such a degree as implies that totally defective condition of mind. Now, pray do the inconsistencies and contradictions of medical men, as to which judges and lawyers are so apt to be facetiously critical, ever reach the magnitude of this self-destructive statement, one, be it remarked, not by any means confined to the Commentator under review? But let us advance to a second sense of the question propounded by him.

"If it be put in this other and more special sense, as relative to the very act done by the pannel, and the particular situation in which at that time he conceived himself to stand (observe—*conceived himself to stand*): Did he, as at the moment of doing that thing, understand the evil of it? Was he impressed with the consciousness of guilt, and fear of punishment? it is then a pertinent

and material question, but which cannot to any substantial purpose be answered, without taking into consideration the whole circumstances of the situation." Doubtless—and so, therefore, it appears a loophole is provided should there be occasion for it—entire alienation is consistent or not, as the case may be, with the presence of such and such faculties; consequently the requirements of law may or may not be insisted on in different circumstances! This dubiety—in truth double-dealing, gloss it as we choose—is made apparent, notwithstanding the pains to conceal it. "Every judgment in the matter of right and wrong," continues Hume, "supposes a case, or state of facts, to which it applies." Yes, certainly, but what then? He answers thus, quite at variance with the fundamental position: "Though the pannel have that vestige of reason (previously supposed to have been completely exhausted or lost) which may enable him to answer in the general (an impossibility under the premises) that murder is a crime, yet if he cannot distinguish his friend from his enemy, but conceive everything about him to be the reverse of what it really is, and mistake the illusions of his fancy for realities, with respect to his own condition and that of others, '*absurda et tristia sibi dicens atque fingens*,' these remains of intellect (observe again, *remains*, notwithstanding 'absolute alienation') are thus of no use to him towards the government of his actions, nor in anywise enable him to form a judgment upon any particular situation or conjuncture of what is right or wrong with regard to it." (More especially, it would appear in the language of Hume.) "If he does not know the person of his friend or neighbour, or though he do know him, if he is possessed with the vain conceit that he is come there to destroy him, or that he has already done him the most cruel injuries, and that all about him are engaged in one foul conspiracy to abuse him, as well might he be utterly ignorant of the quality of murder. Proceeding, as it does, on a false case, or conjuration of his own fancy, his judgment of right and wrong, as to any responsibility that should attend it, is truly the same as none at all. It is, therefore, only in this complex and appropriated sense, as relative to the particular thing done, and the situation of the pannel's feelings and consciousness on that occasion, that this inquiry concerning his intelligence of moral good or evil is material, and not in any other or larger sense."

Now, while a medical man will readily assent to all this, as indicating by much the most frequent case of insanity, he must be allowed to demur in respect to its harmony with the general definition of the malady laid down in law, and with the amount or kind of it demanded by law as an adequate plea for "the privilege of an entire exemption from any manner of pain." Look at the suppositions—the admitted premises—here detailed. The pannel has a vestige of reason, which enables him to answer in the general (of course understanding) that murder is a crime: he has remains of intellect (which, consequently, is not absolutely alienated), and likewise a judgment of right and wrong (though said to be "truly the same as none at all"): but, at the same time, it is predicated of him that the remains of intellect are of "no use to him towards the government of his actions"—that "he does not know the person of his friend or neighbour," or, though he do know him, he is possessed with "a vain conceit" regarding him—that, from a similar source, he supposes others are engaged in a conspiracy against him; and, in short, that, proceeding on a false case, or conjuration of his own fancy, his judgment is quite nugatory or unavailing, possibly even worse than useless. What is the legal result? Hume does not expressly tell us, but leaves to be inferred pretty clearly. "In this complex and appropriate sense" (beyond a doubt *complex*—but what is to be inferred from the term "appropriate"?) the inquiry concerning the pannel's "intelligence of moral good or evil is material"—that is to say, may lead to his "exemption from any manner of pain." Verily, so it should, and to this extent there is an agreement amongst most medical men. But, then, is it

not apparent, contrary to the intimation or authority of the law, that something distinct from alienation of reason—want of judgment or knowledge as to right and wrong—namely, incapacity or unfitness to discern a friend, the conjuration of fancy, a vain conceit of one kind or other, is that alone, or at least mainly, on which exemption from responsibility depends? Is not this really admitted by Hume himself, though it may be covertly, when he refers to "the situation of the pannel's feelings and consciousness" on the occasion—not his degree of reason—as material to the inquiry? In short, is it not clear, according to the premises, that available insanity is constituted less (*negatively*) by the alienation of reason, a deprivation of the knowledge of the true position of things, than (*positively*) by the presence, excess, and supremacy of some thing different from more intellect, such as Hume himself specifies, namely, the "impulse of distempered fancy," "the illusions of fancy," a "conjuration of fancy," "vain conceit," nay, a state of the passions that does not admit control? Of the soundness of this view, experienced physicians can have no doubt, while some writers among them have dwelt on it, as might be shown; here, however, I am confining myself to a statement of what the law on the subject is, as laid down by one competent to expound it. That statement and his preliminary remarks on the practical application of it are, I repeat, singularly at variance, and inevitably issue in a contradiction of sense, if not in plain words. I must insist on this point, and place it in the clearest possible light. We have, then, on the one hand, the broad and perfectly intelligible assertion that, "to serve the purpose of an excuse in law, the disorder *must amount* to absolute alienation of reason" (enforced by the pithy maxim, "*ut continua mentis*," &c.), such a disease as deprives the patient of the knowledge, &c., and of the discernment, &c., and gives him up to the impulse, &c. On the other hand, an admission to the effect, not only that a man capable of correct answers to certain questions, may yet be so absolutely mad as to have lost all true observation of facts, but likewise that, in another case, privileged to the same extent, be it noticed, the pannel, though having a "vestige of reason," "remains of intellect," may derive no advantage from them, find them "of no use to him," even when most required; because, in opposition to their dictates, he is possessed with a "vain conceit," proceeds on a "conjuration of his own fancy," is influenced solely or mainly by "feelings and consciousness," and, altogether, might as well be utterly ignorant of the quality of his actions, and void of judgment to discern right from wrong.

"But to return to the point whence I set out," says Hume, meaning, it is obvious from what follows, the announcement of law. "Our practice has always been governed by the general precept, already mentioned, which admits of no defence short of absolute alienation of reason." Observe—no excuse short of absolute alienation of reason is admissible in the practice of Scotland. Here, then, and before entering on any of the cases adduced in illustration of the practice, while to obviate all cavilling, I may as well determine the precise meaning of the term or terms thus used. Dr. Johnson shall be my guide in the first place. He gives four senses of the word *alienation*, but only two of them are pertinent—namely, 3. "Change of affection," quoting Bacon thus—"It is left but in dark memory, what was the ground of his defection, and the *alienation* of his heart from the king;" and 4. "Applied to the mind, it means disorder of the faculties," as exemplified in a passage from Hooker: "Some things are done by man, though not against, yet without their wills, as in *alienation* of mind, or any like inevitable utter absence of wit and judgment"—really a very fair description of insanity, as insisted on by the law of Scotland—"any like inevitable utter absence of wit and judgment"—*utter* being quite equivalent to *absolute*, that is, according to Johnson's definitions or synonyms, namely, "complete," "unconditional," "not relative," "not limited," "positive, certain, without any hesitation"—one and all, taken in

conjunction with the substantive, implying, as above, "utter absence of wit and judgment," total subversion or transference of intellect, entire deprivation of understanding. This, accordingly, is the amount of disease required for a defence in law, as will be presently seen on recurrence to Baron Hume.

"To that purpose," says he, "the interlocutor upon the case of Robert Thomson, indicted for murder, finds it relevant, and allows him to prove, 'That when the fact libelled was committed, he was so furious, mad, and distracted, *as to be totally deprived of his reason and understanding*; reserving consideration as to the effect of what should be found proven, until the verdict should be returned.' " Again, Hume tells us—"The same principle had governed in the conviction of Thomas Gray (July 26, 27, 1773). This man was indicted for murder, by stabbing. It was alleged for him, that he was of very weak intellect, extremely passionate and flighty, addicted to the immoderate drinking of strong liquors, and, on the whole, what between the use of these and natural infirmity, rather a sort of fool or crazy person, and so considered by his neighbours, than a sound man. This account was confirmed by the witnesses upon the trial, several of whom swore to his being drunk when he stabbed, and that he was at all times a weak and passionate creature, and especially (as they expressed it) 'on the *woodish* order when he got drunk.' All this was plainly short of madness in the sense of law, and the jury therefore found him guilty of the murder."

To the same effect, Hume narrates—"The rule is further confirmed by the case of Robert Bonthorn. The charge against him was that of being a smuggler, and having had contraband goods seized in his possession, he, out of revenge, laid hold of an opportunity violently to push the revenue officer over a precipice upon the sea-shore, whereby the man had his thigh-bone broken, and was otherwise injured. The jury 'find the libel proven, and also find that the intellects of the pannel are most remarkably weak, irregular, and confused, and therefore recommend him to the mercy of the court.' He had judgment, nevertheless, to be twice whipped at different places of the county where he dwelt, and for a sum of damages and expenses."

"For the same reasons which weighed in these cases," continues Hume, "the defence of madness is less suspected, and will more easily be received, against a charge of murder, mutilation, or other violent crime, than of those offences, like theft or forgery, which can hardly be executed without art and steadiness of purpose"—these, Baron Hume might have said, being considered evidences that there was no absolute alienation of reason. Accordingly, he exemplifies thus: "I find that in the trial of Thomas Henderson, for horse-stealing (Feb. 22 and March 9, 1731), it was pleaded for him that he was subject to occasional fits of madness. But the libel charged, that he had conducted himself prudently in the adventure, having stolen the horse in the night, and ridden straightway by an unfrequented road to a distance, where he left the horse, under a plausible pretence, and, last of all, sold it, and took a bill for the price. The interlocutor, therefore, did not take notice of this allegation, but repelled in general all the pannel's defences."

In respect to all these instances—the issues of which need surprise no one—I have simply to remark that, while absolute alienation of reason was not even pretended to exist in them, so, on the other hand, they appear, from the evidence adduced, to have been free from those delusions, deceptions, or hallucinations which occur in and characterize the insanity recognised by medical men. I would say of them, consequently, and in the general, that, while they point out the ordinary, and, be it admitted, the correct application of the law, nothing was either presented or alleged in them to indicate its unsuitableness as a common and unmodified rule. Let us then advance.

"But although the distemper must thus be absolute in degree, it is not material that it be also total in respect of time. The quality of the action has no

dependence but upon the pannel's state of mind at the time of doing it; so that whether his malady be constant and unremitting, or only return at intervals, still the defence will be equally available, if he was then utterly furious and void of reason." Observe the expression, "*and void of reason*"—not alone "utterly furious." Accordingly, Hume says—"Here I may cite the case of Sir Archibald Kinloch (June 29, 1795), which was that of a person who, having had his senses injured by the acute delirium of a West India fever, was afterwards liable to occasional fits of derangements, though at considerable intervals, and at length, in a state of utter furiosity, had the misfortune to kill his brother. The violence of this fit had only been for a few days before the fact, and he soon after settled into his ordinary condition. Nevertheless, the jury were unanimous to acquit him." I have no doubt they were right; but the case, I imagine, scarcely bears on the matter at issue. Hume follows it by another "in some measure of the same description"—that, namely, of Robert Spence, tried for murder (June 19 and 30, 1747). "The pannel and the deceased, who was a woman and teacher of a school, were inhabitants of different floors in the same building. And it appears that, having risen in his shirt, in the dusk of the evening, and knocked at her door, he, upon opening, instantly rushed in, and uttering some strange and incoherent exclamations against the woman, knocked her on the head with a hatchet or chopping knife, which he brought with him. After despatching her, he ran off to his own house, and when a *posse* assembled to seize him, he suddenly sprang out upon them, and attempted to escape. It was also a remarkable circumstance that, on returning to his house, he had taken offence at a wig-block which stood there, and violently clove it down with the same hatchet; so that it was found all besmeared with the woman's brains and gore. With regard to his symptoms of disorder for some days preceding, they were chiefly these:—a great degree of restlessness, a disposition to ramble through the country at all hours and without an object, incoherent discourse and disorderly behaviour, though without any act of outrage or violence offered to his neighbour. But it was farther proved that, some years before, when employed as a sailor, he had occasionally shown symptoms of derangement, which were aggravated by drinking, so that he had sometimes been confined on board of ship for eight or ten successive days as insane. The jury found it 'proven that the pannel was furious at the time he committed the said murder, but to what degree of furiosity they could not determine.' On which verdict the court ordered him into confinement, until bail should be found by his relations to keep him in a state of safety." I admit all this to have been correct in point of principle.

Hume says—"There is one more case of the same character upon record—that of Jean Blair (March 14, 1781), who, with a hatchet, cruelly mangled and killed her mistress, with whom she had lived some years as a confidential servant; and then, after setting fire to the house, and defacing the effects within it, ran out stark naked, and with her hands bloody, into the street, and gave the alarm of fire to the guard. It was proved that several of her family had been insane, and that she herself had shown symptoms of insanity about ten years before. She was acquitted of the murder, but ordered into confinement." Very justly, I dare say; but the plea of absolute alienation seems to have been lost sight of; while it is important to observe, that the evidence both of family and personal derangement—to what degree does not appear—was allowed to be received.

Baron Hume expressed dubity whether he ought to refer to the same or to another class, the case of Robert Thomson, previously mentioned. "It was in all its circumstances an extraordinary case. The pannel was accused of the murder of George Forrester; committed at mid-day, by knocking him down from his horse with a stone, and cutting his throat with a pen-knife, as he lay on the ground (a muir on the highway from Haddington to Aberlady)."

Pannel was a blacksmith, and had been employed in his trade as usual, that very morning, till ten o'clock. And farther, not more than half an hour before the murder, two persons, who met him on the highway, had spoken to him in passing, without observing anything unusual in his appearance. A few hours after committing the murder he was taken into custody, and, in the afternoon of the same day, when being conveyed to the jail, he had so far recovered as to be sensible of the deed perpetrated; farther, too, he pointed out the precise spot where he had killed the deceased: showed "the innocent blood" (as he called it) on the ground; said that his own would be shed for it; and expressed concern on account of the distress which he would bring upon his father. He also related to the persons who had charge of him upon the way, that the deceased had many times cried for mercy while he was striking him on the ground; but, "I trow (said he) I had no mercy on him, for I believed it was the devil I killed." In the same strain he added that, before meeting the deceased, he had chased the devil through the muir in another shape—"like a man with a whin-cow in his hat," and who suddenly vanished before him in the pursuit. In confirmation of these strange circumstances, it was proved, that the pannel was subject to convulsive fits, especially at full moon; and that he was melancholy after them, and liable to be troubled with religious horrors, so that he sometimes started from his bed in the night, and spoke and acted as if he were grappling with the devil. He had been seized with one of these fits before the murder, but it had not been followed by any extraordinary depression of spirits. The jury returned a verdict finding "no proof of furiosity till after the murder was committed;" as, "indeed, no one was present to judge of his appearance at that time, and recently before he had been in his ordinary condition. Yet, upon the whole circumstances, there was little room to believe him guilty; and in this light the case had been viewed elsewhere, for he received a transportation-pardon." Here Hume obviously points to Crown interference, because sentence of death must have followed such a verdict—neither furiosity at the time nor absolute alienation of reason having been proven; and yet, I presume to maintain there cannot be any hesitation, among physicians at least, to assert the man's insanity—though, very clearly, it was not without "method," or, in reality, what he thought to be a good object. The absurdity of insisting on a strict interpretation of the law, requiring the sole negative quality—if I may so call it—as an excuse, is palpable in this very instance, were there no other on record. How long will it be ere a conviction shall predominate among lawyers and juries, that, in many cases—perhaps the majority—horrid deeds of the kind have proceeded from the invasion of disease, in which, nevertheless, what is called reason was not at all impaired, not to say annihilated? That the case of Thomson was extraordinary, as Hume states, will be admitted by those only who are not much conversant with the phenomena of insanity, and, particularly, by such as confine their views to the dogmas of merely legal men. But, passing by for the present what experienced physicians must think of it, we come to what Hume represents as "still more strange than any malady of this kind." "There have," he tells us, "even been instances of sudden and, in a great measure, unaccountable frenzy, and which, though excessive for the time, quickly subsided, and never again returned." *There have been*, beyond a doubt, and there will be, in spite of legal exactness. My wonder, and that of others in concurrence, is that, notwithstanding such exactness, Hume should have found occasion to add—"in these, too, the plea of insanity has been sustained." He goes on in proof—"A history of this sort is related by Sir M. Hale; that of a woman who was tried at Aylesbury, in 1668, for the murder of her own child. She was a married woman, and of undoubted good fame and virtuous deportment. But not having slept for some nights after her delivery, and, by this and other disorder of her person, having fallen into a sort

of delirium, and being left alone, she killed her infant; which, presently after, she showed to some persons who came in, and told them she had done it. She was instantly carried to jail, where, in a little, she fell into a deep sleep, and on awaking was found to have recovered her senses, and marvelled much how, or on what account, she had come there. The jury very justly found her not guilty of the murder."

It is gratifying to see such an opinion—"very justly;" but what might have been the result had the poor woman been unmarried, of bad fame, and in any degree vicious? Sudden frenzy, we may rest assured, is by no means confined or peculiar to amiable and worthy mothers. I advance.

"Very like this," says Hume, "though the verdict was different, was our case of Agnes Crookat, of the 23rd July, 1756. This woman also had killed her own child. She was an unmarried woman, but had called help to her delivery, and had openly kept and suckled the child for the space of six or seven days. It was sworn to, that, at times, upon the day of the fact, she had been strange in her speech and behaviour, but to which the witnesses had not paid much regard; and being left alone with her child, she laid hands upon and strangled it. She kept it, however, lying openly by her in the bed, till the people of the house returned, and then she showed it them, and told them what she had done, and said that the devil had tempted her!" The case was thus far weaker than the former, in that there was no clear proof of bodily complaint, or of a marked transition from a state of disorder to soundness. The jury, therefore, found her guilty. But "the Royal mercy interposed to prevent her execution." I confess the difference between this and the preceding case—considered medically—does not seem to me so great as to have warranted any in the verdict. Hume, it is true, attaches importance to the existence of bodily complaint; but who knows, I would ask, the amount of it therein, and whether or not there was an equal degree of this in the latter instance? I would further ask, is it quite clear that, according to strict law, any condition of bodily health, not demonstrably affecting reason, to the amount prescribed—that is, absolutely alienating it—ought to influence a jury? We shall be a little enlightened on this point by "a third case of the like character, tried at Jedburgh, in April, 1785," and which issued in a verdict of acquittal.

"The pannel was a man named Robert Coalston, a husbandman or farm-servant. Some years before the fact, he had been struck with lightning, and from that time had occasionally been subject to melancholy and depression of spirits, but not in any remarkable degree, nor such as hindered him to do his business as a servant, and without any sort of tendency to violence or mischief. But of a sudden, and without any new or visible cause, the man became restless and impatient, and having left his master's house in the middle of the night, set a-roaming through the country, without plan or object, and behaving absurdly as he went along, but still without offering violence to any whom he met. In the evening of the next day, he returned to his master's house; and by this time having waxed outrageous, he abused his fellow-servants; assaulted and struck his mistress; and, having suddenly snatched an infant out of her arms, which she had upon the breast, he ran off with it out of the house. A few minutes after, the child and he were found together in an outhouse, the child dead, and dashed to pieces, and the man sitting quietly by it, as quite unconscious of what had passed. He made no attempt to fly or resist, and was carried to jail, where he soon settled into a state of languor and stupefaction; out of which when he recovered, in the course of a few days, he seemed to have no remembrance of these incidents, and suffered great agitation on being told what he had done. (Baron Hume, in a foot-note, says, 'These circumstances do not appear on the record, but are known to me as counsel for the pannel.') The jury found the slaughter proved, but the insanity also proved, and he was ordered into confinement."

It is not to be doubted, that, in this case, Hume attached high consequence to the bodily health as affecting the mental state; and that this materially influenced the jury, who, however, as it strikes me, erred in the complex nature of their verdict. If the insanity were proved, then, technically, and in the eye of law, the slaughter could not be so. A verdict of not guilty—on the ground of derangement—would have been correct. To the statement of this case, Hume adds a short but expressive sentence. "In short, how unaccountable soever to us these visitations of sudden and temporary madness, yet still they are within the compass of this miserable privilege, if the utter alienation of reason for the time be proved." I would desire no other than this passage as an acknowledgment of, at once, inability to explain a physical phenomenon, its validity in excuse of an otherwise unpardonable crime, and the fiction or assumption of law to interpret what is declared to be inexplicable.

Our commentator states only one more instance "of the plea of furiosity sustained," in which "there is anything worthy to be remarked." It is that of James Sommerville, tried in 1704. "This man was one of the town officers of Edinburgh, and had shot a soldier of the town-guard, one of a party which had been sent to seize him, on his becoming outrageous." The chief circumstances alleged in evidence of his insanity are thus narrated: "1. Three or four months before the deed, the magistrates of the city, having observed indications of derangement, had ordered him to keep at home, and appointed him a weekly allowance during his confinement. 2. He had conceived a jealousy of evil intended him, and had applied to the provost for a safe conduct or protection, which was given him, out of indulgence to his humour. 3. About four months before the slaughter, he had called for a sword to kill his brother, who came to visit him. 4. He became slovenly in his person and apparel, instead of careful as formerly, and walked out into the streets with his stockings loose about his heels. 5. He uttered strange and hideous cries in church, and in time of divine service. 6. On the morning of the day libelled, he ran into the street in his shirt, with a drawn sword, and threatened his neighbours. 7. On being committed after the fact, and desired to give up his officer's coat or uniform, he was scurrilous to the magistrate, and desired him 'to go hang himself and his coat.' 8. After commitment, he was so disorderly that it was necessary to confine him in the iron cage. The Court sustained the defence as to his being mad, relevant to assuage him from the ordinary pain, the pannel proving that the same morning the defunct was slain he went through the wynd in his shirt, with a drawn sword in his hand, threatening his neighbours, and any other *two* of the qualifications of fury condescended on, except the *fourth*, on which the Lords lay no stress." The jury returned a special and awkward verdict, but which had the effect of saving the pannel's life. It is, indeed, somewhat of a curiosity throughout. "Find it proven—1. That there was a warrant or order given by Baillie Warrander to go to the pannel, and endeavour, by all fair means, to bring him with the said Baillie. 2. We find it proven, that the pannel threatened the persons that desired him to open the door, and go to the said Baillie. 3. We find it proven, that the time they were breaking up the door, Henderson, the defunct, received a shot through the lock-hold of the door, which gave him several wounds in his body, and that he died about twenty-five days thereafter. 4. We find it proven, that when the pannel opened the door, after the shot, he asked, 'How all was?' and he was told by Ferguson, Smith, and Imes, that he had killed a man, to which he made answer, 'God have mercy upon my soul.' 5. We find it proven, that some months before this fact, like the pannel had acted a furious or mad man. 6. We find it proven, that after the fact was committed, the pannel gave Baillie Warrander scurrilous language. And, lastly, finds proven, that at the time the shot was given, and the door opened, that Ferguson, the officer, and soldiers, found the pannel and his wife together."

It seems quite evident, from the fifth point in this strange verdict, that there had been great inattention to the real and clamant derangement of the prisoner, who ought certainly to have been confined at an early period of his malady—but not exactly "*in the iron cage.*"

With this instance Baron Hume closes his series of cases. He then proceeds to discuss what are styled the "Presumptions in cases of Insanity."

In regard to the proof of furiosity, we find it laid down as not disputed, that, "in the case of one who has always been reputed sane, it lies with the pannel fully to establish this, equally as any other defence." "But," he adds, "as to the case of lunacy, or periodical madness, a controversy is agitated in the law books, whether it shall be that the deed was done in furiosity or in a lucid interval." "One thing," he declares, however, "is obvious on this head, that there is no room for presumption, unless, in the case, which cannot be a frequent one, that the jury cannot come to a conclusion either way, upon the proof of the pannel's situation of mind, as at the time when the deed was done. For if there be a proof applicable to that period, and if it either establish no symptoms of the disorder, or but very slight ones, it will not defend the pannel that he had formerly (as was the case of Lord Ferrers) and for a length of time been insane." As to "situations of a doubtful character," he says, he can imagine but one "in which it may be reasonable to presume for the influence of disease upon the act." It is that of a person "who ordinarily and for a course of years has been insane, with but few, and short, and imperfect intervals of reason; and more especially," he admits, "this will be just if he is found with the plain symptoms of furiosity upon him recently after doing the deed." He supposes a strong case—namely, that of "one who for years has been confined in a mad-house, if, taking advantage of the occasional liberty which is indulged him, on the faith of any seeming intermission of his fury, he shall make escape from his friends, to whose society he has been restored, and shall kill a person when no one is by to bear testimony to what passes, and shall, afterwards, in the course of the same day, be taken in a state of absolute distraction; he may seem to be within the privilege of this humane construction. In the case, on the contrary, of one whose lucid intervals have been longer and more frequent, the presumption upon a doubtful and defective proof shall be against him, though, by reason of the faulty habit, and the natural suspicion of the lurking vice, where it has once shown itself, weaker evidence may here be admitted to cast the balance than in the trial of one who has never been subject to this affliction. The situation is still more unfavourable to the pannel, if his ordinary condition be that of a sound man, or if his lucid intervals have generally been at stated periods, and of nearly the same endurance, and the deed is done within the regular period of such an interval."

Considering the requirements of law, these are liberal and judicious propositions; while, from the sentiment following them, one might infer that Baron Hume, aware of their value, did not feel assured of their adequacy to afford due security in circumstances of doubt. "But truly," are his words, "it is a vain attempt to compress within a few short maxims all the possible varieties and combinations of these miserable disorders. And, on the whole, it will be much safer to conclude, that if ever so ambiguous a case shall happen, the question will rather be fit for the consideration of the jury, on the whole history and circumstances of the particular malady, as detailed in evidence to them, than for the resolution of the court, as matter of law, by any general rule." Admitting, gratefully, the justice and the mercifulness of this reflection, I submit that the question, or inquiry, touching a matter of fact, is exceedingly important to the community at large—namely, have the proceedings of our courts, and the modes of charging juries, together with the summing-up of evidence, usually been such as actually to bring decisions within the range of common sense and reasonable sympathy? My experience and observation do not, it is very certain

entitle me to make reply to such a comprehensive query; but I am grieved to declare, most unequivocally, that, on more than one occasion, it has been my unhappiness to witness, within this sacred province, a tone and spirit which I should have regretted to find in the lowest police-office.

There only remains, in this department of Hume's work, what relates to the judgment in cases of insanity, and this, being almost purely technical, will not detain me long.

The result of a verdict, "finding the defence of furiosity proved," cannot well be any other than the entire acquittal of the pannel—"cum satis furore ipso puniatur." According to Hale, this must equally hold true, "of whichever kind the madness be; whether it be attended with rage, fury, and tempestuous violence, or is only such as takes away the use of reason and memory, and leaves the person in a state of imbecility and stupor; in which, if, as a machine, he do any evil, though without *impetus* or rage, it is not a proper act of his, for which he can be accountable in law." One can scarcely help feeling not a little surprised at such a large concession, adopted after the strictness of interpretation previously contended for; and equal difficulty is there in avoiding the opinion, that it has been forced out from a discovery of the inconsistencies between strict law and some decisions said to be founded thereon. Surely, if the result of such a verdict as is supposed hold *equally true*, "of whichever kind the madness be," the definition of that malady must be taken more largely than is usual; and, moreover, a greater variety and latitude of evidence in support of a plea to that effect, than seems to have always been allowed, must be tolerated in court.

"As to the inferior degrees of derangement or natural weakness of intellect," continues Baron Hume, "which do not amount to madness, and for which there can be no rule in law, the relief of these must be sought either in the discretion of the prosecutor, who may restrict his libel to an arbitrary pain, or in the course of application to the king for mercy. Yet I find, in one case—that of Somerville—though perhaps not to be approved of as a precedent, a middle course was taken, by absolving the pannel from all corporal pain, but decreeing for a fine to the fiscal, and asyhtment to the widow and children of the deceased." In both points here mentioned, Hume, I should believe, is perfectly correct—on the supposition that his general view of what constitutes madness, as distinct from "the inferior degrees of derangement," is so.

"One matter, however, there is," concludes Hume, "for which, by just and uniform custom, the Court take order by their sentence, except in those rarer cases of delirium from fever, or other bodily disease, for which an undoubted momentary cause can be assigned;—I mean the providing of security to the public, and to the pannel himself, against the danger of his malady, if unhappily he shall again be afflicted with it. To this end, in the case of Sommerville, the Court appointed him to be confined in the house of correction, 'never to be liberated therefrom, but upon a certificate under the hands of the magistrates and two known physicians, that he has convalesced, and become sound in his judgment.' But more ordinarily the course has been to qualify the order of confinement by a humane provision, allowing the magistrates or keeper of the jail to deliver over the pannel to such relation or other person who shall find sufficient bail in the books of adjournal, to the satisfaction of the Court, and under such penalty as they shall appoint, to keep and detain in safe custody for the future. Deliverance was given to that effect in the case of Robert Spence, in 1747; of Jean Blair, in 1781; of Robert Coalston, in 1785; and of Gordon Kinloch, in 1795; in which last case the penalty of the bail-bond was ten thousand pounds." I do not here advert to later modifications of the provision in question.

Thus, then, I terminate my extracts from that portion of Baron Hume's work which relates to the plea of insanity as having, equally with the state of an

infant, the privilege, in all cases, of entire exemption from any manner of pain or penalty. This portion is characterized by the author's usual industry, good sense, unimpassioned sobriety of thought, candour, and homely, unaffected style. I imagine, notwithstanding these properties, that it displays less satisfaction in his own mind than he seems to have entertained when viewing generally the criminal jurisprudence of Scotland, together with less precision and conclusiveness of opinion than he elsewhere manifests, in either supporting or at all dissenting from—he rarely censures—the dicta of judges and the verdicts of jurors. If right in this estimate, I should feel small difficulty in accounting for and sustaining it. Seeing the imperative requirement, and bound, simply as a commentator, to maintain it—namely, that “to serve the purpose of an excuse in law, the disorder must amount to absolute alienation of reason—to a disease which deprives the patient of the knowledge of the true position of things about him,” &c.; in fact, such an amount and kind of derangement (fully proved, too) as very rarely occurs, even in the most extensive practice of medical men, and, accordingly, cannot often be borne out by evidence in any court whatever; seeing this, I say, on the one hand, and being aware, on the other, of some, at least—indeed, many—of “the possible varieties and combinations of these miserable disorders,” under which, though there may be a “vestige of reason,” sufficient to enable a man “to answer, in the general, that murder is a crime,” he nevertheless “cannot distinguish his friend from his enemy,” but “conceives everything about him to be the reverse of what it really is, and mistakes the illusions of his fancy for realities”—under which, again, though there may be “remains of intellect,” they are nevertheless of “no use towards the government of actions,” nor “in anywise to enable a man to form a judgment upon any particular situation or conjuncture”—under which (the enumeration is about half completed), though there may be “a judgment of right and wrong,” it is “truly the same as none at all”—under which, though there may be “intelligence of moral good or evil,” yea, and discernment both of persons and things, nevertheless, a “vain conceit,” an unfounded suspicion, the belief of “a false case,” the “conjunction of fancy,” shall predominate in and overrule “feelings and consciousness;”—knowing, besides, the effects and consequences of certain injuries and ordinary maladies, frequent instances of “sudden and, in a great measure, unaccountable frenzy,” “visitations of sudden and temporary madness;” lastly, being alive to the cogent fact that all these and other phenomena may and do exist in innumerable degrees of intensity, under innumerable diversities of circumstances, with innumerable modifications of the mental faculties—themselves involving mysteries, even in the healthy state, as innumerable;—what wonder is it, can any man ask, that the *prejudiced* spectator of their occurrence, though faithful historian of their reception in court, and scrupulous annotator on their fate, should be perplexed by conflicting representations, unable to reconcile them to one antiquated dogma, and much more anxious to furnish other men with a convenient mode of avoiding distinct judgment on them, than happy in divesting himself of a conviction that in many cases this, if actually pronounced, must either outrage humanity, or carry what he styles a “miserable privilege” too far? For my own part, I doubt greatly if Baron Hume ever suspected the true source of the dilemma, obstacle, embarrassment, confusion, and perils, which honest and compassionate juries must frequently encounter—encounter, too, without aid, or guidance, or mitigation, till new light break in upon the law itself—an effulgence from science and philosophy to which, I may safely affirm, some of its administrators have manifested anything but a docile or even a self-becoming spirit.

Should I be permitted to follow up this brief review by similar productions, I shall endeavour, not without hope, to engage the public mind and sympathy in a cause which, though perhaps at first sight ungracious or positively repulsive, will be found, on better acquaintance, as worthy of regard as it is beset

with difficulties. That these may be overcome by united and persevering efforts is at once the reason for, and the encouragement of, my own individual labours.

Baron Hume's main proposition, given as preliminary, is in these words—
 "How clearly soever a crime may be proved to have been committed, there may be circumstances in the situation of the pannel which prevent him from being the fit object of punishment. He may be insane at the time of the trial, or he may have been so at the time of the acts in question." This is an admitted and an indisputable point. I proceed then at once to the nature of the defence founded thereon. "If insanity," says Alison, "be of that complete and perfect kind which entirely overpowers the reason, and takes away from the pannel the power of distinguishing right from wrong, or knowing what he is doing, it forms a complete bar to any criminal prosecution; and the pannel is ordered to be disposed of in such a way as to prevent his being hurtful to others in time to come." Observe—"entirely overpowers the reason, and takes away the power of distinguishing, &c., or knowing what he is doing"—clear and strong terms, which I believe admit of no doubt whatever. "But," says Alison, "several nice and delicate questions arise as to the degree of insanity which, in law, have this effect." Now, not to dwell on the seemingly ungrammatical expression here used—the relative "which" applying to "questions," if the verb "have" be right; whereas, in reality, as I apprehend, "the degree of insanity which in law has this effect" is that about which "nice and delicate questions arise." I say—not to dwell on this trivial error—is it not rather strange that, the major proposition or definition being limited to "that complete and perfect kind of insanity which entirely overpowers reason, and takes away the power of distinguishing," &c., there should be any question at all as to the degree required in law? Most certainly questions may and do arise as to matters of fact; but, in respect to law simply, one would imagine there ought to be none, unless—if even this were of any consequence—completeness and perfection admit of degrees; and it were possible that, when or after a power is taken away from a man, it should still remain in him? We shall see how this matter—apparently incomprehensible, and involving a contradiction—is attempted to be cleared up.

Alison's first special proposition is as follows:—"To amount to a complete bar to punishment, the insanity, either at the time of committing the crime, or of the trial, must have been of such a kind as entirely deprived him of the use of reason, as applied to the act in question, and the knowledge that he was doing wrong in committing it." Here we have the former position, but modified in a peculiar manner, "entirely deprived of the use of reason," as "*applied to the act in question*;" and, accordingly, a distinction may hence spring up. Alison thus comments on the statement: "Though law requires, as a complete defence against a criminal prosecution on the ground of insanity, that the pannel should have laboured, at the time of committing the act, under a complete alienation of reason (referring to Baron Hume), yet it is not to be understood that this means either that he was altogether furious, or did not understand the distinction of right or wrong." Indeed! In the face of a definition which insists on the reason being "entirely overpowered," the power of distinguishing right from wrong being "taken away," or, as stated immediately above, "a complete alienation of reason!" And yet judges and lawyers will tease, sneer at, medical men, for their inconsistencies and conflicting statements! But Alison justly remarks: "Cases of that extreme kind (the absolutely alienated) very seldom occur, and certainly much more unfrequently than the instances in which the pannel's state of mind has been such as to render him not a fit object of punishment." Farther, he adds, with entire truth: "It is very seldom that a mad person is either deprived of the power of knowing what

he is doing, or of reasoning and conversing on its different subjects (what is meant by the pronoun "its" may be inferred), or of understanding the distinction between right and wrong, in the *general* case and with reference to other persons." But then it would seem, notwithstanding repeated assertions, the requirement of law *does not* tally with the limitation here adduced, unless, indeed, we can prove an impossibility, namely, that "entire deprivation of the use of reason," its "absolute alienation," is consistent with the state of a man, who, though reckoned mad—excusably so—for this is the state supposed—nevertheless possesses the power of knowing what he is doing, of understanding the distinction between right and wrong—yea, too, and of reasoning and conversing thereon. Alison, it is true, adds, "in the *general* case, and with reference to other persons;" but this qualification, very obviously, merely shifts the position of the error perpetrated in the law itself, and leaves intact the difficulty of applying it to numerous cases. We shall find the same incongruity hereafter, as carried out in practice; nay, it is presented in the very next sentence of Alison's *Commentary*. "The great characteristic of insanity, which originates in the general case, is an excessive turning of the mind to its own affairs, consists in an alienation of reason with reference to itself, and in the illusions under which it labours, and the chimeras it has nourished in regard to its own concerns. Few men are mad about others, or things in general; many about themselves. Although, therefore, the pannel understands perfectly (the admission, I need scarcely remark, is strong enough to imply the very reverse of absolute alienation) the distinction of right and wrong; yet, if he labours, as is generally the case, under an illusion and deception, as to his own particular case, and is, thereby, disabled from applying it correctly to his own conduct, he is in that state of mental alienation which renders him not criminally answerable for his actions." Now, granting the accuracy of this description, which is really not far from a true portraiture, as known to experienced men, might we not fairly expect that the terms of the law should be in accordance with it, or, at the very least, that in place of insisting on a *negative*, they maintained the necessity of a *positive* state or condition of mind as characteristic of excusable insanity, namely, such as Alison himself denotes, rather sparingly, indeed, but still intelligibly, "illusions and chimeras, an excessive turning of the mind to its own affairs," madness about one's-self, all, it seems to be admitted, quite compatible with soundness in regard to other persons and things in general?

I do not stop here to animadvert on the curious circumstance, the apparent anomaly (judged of in relation to what law exacts), represented by Alison, when, resting on what he deems the "great characteristic of insanity," namely, "an excessive turning of the mind to its own affairs," he, at the same time, allows that the pannel "understands perfectly the distinction of right and wrong," and yet labours under an illusion and deception as to his own particular case. It does, indeed, seem mysterious that such an excessive turning should be accompanied by, or productive of, disability or inability in other respects. But the difficulty to account for the fact, well known and often exemplified, is neither removed nor lessened by the hypothesis which joins complete alienation of reason with the possession of sound judgment, limited as the latter may be in application. We shall find, accordingly, that a degree of confusion—in truth, a species of contradiction—pervades nearly all the attempts at reconciling legal decisions to the actual facts of cases on record. Alison gives a general view of these under a specific form.

"For example, a mad person may be perfectly aware that murder is a crime, and will admit that, if pressed on the subject; but still he may conceive that a homicide he had committed was nowise blameable, because the deceased had engaged in a conspiracy with others against his own life; or was his mortal enemy, who had wounded him in his dearest interests; or was the devil incarnate, whom it was the duty of every good Christian to meet with the weapons

of carnal warfare. If, therefore, the accused is in such a situation, that, though possessing a sense of the distinction between right and wrong, he cannot apply it correctly to his own case, and labours under an illusion which completely misleads his judgment, as mistaking one person for another, or fastening a dreadful charge, entirely groundless, on a friend, he is entitled to the benefit of the plea of insanity in defence against a criminal charge" (referring to Baron Hume). Very properly, say I; but, let me ask, on what grounds, in the face of a law demanding proof of absolute alienation of reason; whereas, on the showing of the case, that faculty, so far from being even in abeyance, not to say abrogated, is actually exercised and manifested? I shall be answered, of course, by the remark, Oh, he cannot apply it correctly to his own case. It may be so, I rejoin; but why? Because, adds my opponent, he labours under an illusion which completely misleads his judgment, because he is grossly mistaken in his conception of things, specially and obviously deceived. Not a doubt of it. But, granting this, why is not the decision in his favour placed on the right, the true basis, the illusion, the mistake, the deception, instead of a fiction, a misnomer, nay, a nonentity, "absolute alienation of reason," disproved and utterly contradicted by admitted facts? Let jurists meet this question as they please. Common sense will deem it answerable in one way only, and pronounce the law to be an absurdity.

Alison goes on, still maintaining the interpretation now adverted to. "This principle was well expressed by Dr. Monro, sen., in the case of David Hunter, 13th March, 1801, charged with murder. Dr. M. deponed that he was incapable of judging of the propriety of his actions, or of reasoning with propriety upon them; and, in particular, he gave the deponent a strong indication of this, by leading the deponent to believe that he had been led to commit the crime of which he stood accused, by the circumstance of the women whom he was accused of shooting, having *smothered his own mother*, in the presence of a number of persons who had made it up among them; and that the pannel did seem to have any remorse at what had happened, saying repeatedly that the women had shed innocent blood." This statement is followed up by a quotation from Lord Hale. "It is the condition of very many, especially melancholy persons, who, for the most part, discover their defect in excessive fears and griefs, and yet are not wholly destitute of the use of reason; but this partial insanity seems not to excuse them in the committal of any capital offence. Doubtless mad persons who kill themselves are under a partial degree of insanity when they commit these offences; and it is very difficult to define the invisible line that divides perfect from partial insanity; but it must rest upon circumstances, to be duly weighed by the judge and jury, lest, on the one hand, there be an inhumanity towards the defects of human nature; or, on the other, too great an indulgence shown to great crimes."

Partial insanity, that condition in which a man is not "wholly destitute of the use of reason," seems, then, according to Hale, evidently approved by Alison, "not to excuse him in the committal of any capital crime;" "mad persons that kill themselves," are, doubtless, it would appear, in that condition, for, as the former says, they are under a partial degree of insanity when they commit these offences, which, therefore, are without excuse, though almost invariably declared otherwise at inquests; and the line of distinction between perfect and partial insanity, which cannot easily be traced—indeed is invisible—"must rest upon circumstances to be duly weighed," &c., that is, judges and juries must be guided by these, candidly and humanely considered, in coming to a decision in each individual case. Now, in the very instance of Hunter, above given, as to which Dr. Monro is said to have "well expressed" the principle contended for, I think it quite clear that there was no evidence whatever of the man being "wholly destitute of the use of reason;" that, on the contrary, he actually displayed an exercise of it (erroneously, no doubt) in the deed with which he

was charged; and that the terms employed by Dr. Monro to denote his condition, besides really affirming this last fact ("he gave a strong indication, &c., by *leading the deponent*," &c.), are by no means equivalent to, or synonymous with, a declaration amounting to the degree required in law as a valid excuse. What does Dr. M. exactly mean? Not surely that the man was totally deprived of judgment or reason—incapable of exercising any whatsoever or in general—but "incapable of judging of the propriety of his actions, or of reasoning with propriety upon them;" and why or how so? Not because of a radical deficiency in, or the absence of, such a faculty, but, as Dr. M. evidently implies, because of a circumstance (true or false matters not) which the man positively believed, and through the still existing influence of which he was exempted from "any remorse at what happened," saying, expressively, "the women had shed innocent blood," and leaving the inference to be made, "therefore deserved to die," another proof of reason in exercise, be it noticed, under a delusion. That delusion, then, it appears, constituted the essence of his malady, and not the want or even the impediment of reason.

Sheriff Alison himself, I suspect, must have occasionally arrived at something like a similar conclusion, and probably, therefore, felt a misgiving as to either the interpretation or the application of the fundamental law. I find, accordingly, that, having detailed the case of Robert Spence (for which see my notes on Hume), terminating in the dubious verdict, "the pannel was furious at the time he committed the murder, but to what degree they (the jury) could not determine," in pursuance of which he was ordered to be confined for life. Alison adds, "it was plain that, though not insane on every subject, he laboured under some hallucination with reference to the object of his violence." So, then, in this instance, it would appear, contrary to Hale's position, "partial insanity" did form an excuse; while, to their credit be it said, the jury "duly weighed" circumstances, and came to a decision no less humane than judicious. Were successors to follow their example, legal or legalised murders would be comparatively "few and far between."

"Of the same character," according to Hume, followed by Alison, without particular remark, further than as expressive of approval ("of course, acquitted," &c.), was the case of Jean Blair (for which see former notes). He comes next to "a more difficult case," and which, he says, "well illustrates the delusions under which insane persons labour," namely, of Robert Thomson. Hume, as will be seen elsewhere, terminated his narrative of it thus, "upon the whole circumstances there was little reason to believe him guilty (meaning, because really insane); and in this light the case had been viewed elsewhere," &c.; to which Alison adds, "there seems little doubt that he was insane at the time of committing it" (the murder).

We have now another similar case, that of Ann Sparrow, autumn, 1829 (of course, not in Hume's first edition), and of which the following are details. She had, it appears, poured vitriolic acid in considerable quantities down the throat of her own child (a girl seven years old), and nearly killed it. After the horrid deed, "she ran into the neighbours' houses in a state of evident derangement, saying that she had killed the devil." Before this, however, she had frequently threatened her own life—expressed a resolution to commit suicide. "The case was proved, as well as the insanity, and she was ordered to be confined for life"—a decision, every one will probably grant, quite unexceptionable. "So also," says Alison, "in a case related by Sir M. Hale," of which, as of some other cases, I have said enough in the previous article.

(To be continued.)

ON THE CAUSES AND MORBID ANATOMY OF MENTAL DISEASES.

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(Continued from p. 147, No. XXIX.)

No. 101.—M., æt. 52. In hospital eleven years and two months.—*Head*: Some serous fluid escaped on opening dura mater. Arachnoid covering cerebral hemispheres opaque, and accompanied in considerable degree with thickening in neighbourhood of great longitudinal fissure: here arachnoid surfaces slightly adhered. Near extremity of left posterior lobe, a brownish red adventitious membrane, rather larger than a crown-piece, closely adhered to dura mater. Cellular texture of pia mater infiltrated, and increased quantity of fluid in ventricles.

No. 102.—M., æt. 46. In hospital six months.—*Head*: Cerebral hemispheres flattened, especially anterior lobe. Arachnoid thickened, opaque, and of yellowish-white colour. In layers of pia mater covering hemispheres, large quantity of serum slightly tinged with blood effused. Convolutions atrophied. Cerebral substance moderately firm. Increased amount of serum in ventricles. Some small transparent cysts, containing limpid fluid, in spheroid plexus. Fornix softer than brain.—*Chest*: Both lungs extensively diseased, tuberculous, and broke down readily under pressure.—*Abdomen*: Entire large intestine congested, thickened, and presenting patches of ulcerated glands. Some parts of bowel converted into dark red structure, covered with thin layers of slough.

No. 103.—M., æt. 34. In hospital five days.—*Head*: Bloodvessels of cranium, membrane, and brain, all extremely turgid. Bloody points on cut surfaces of cerebrum large and very numerous. Arachnoid of moderate milky whiteness over whole hemispheres, and slightly thickened on convexities. Pia mater somewhat infiltrated, and adhered very firmly to convolutions. Left hemisphere of light murky hue on surface. Lateral ventricles contained at least two ounces of limpid fluid; and much also remained at base of skull after brain was removed.—*Chest*: Pleurisy and pneumonia in left lung, with extensive mortification. Right lung partly hepatized, rest mortified, dark coloured, and emitted a most offensive odour, particularly from concave surface.

No. 104.—M., æt. 55. In hospital two months and three weeks.—*Head*: Skull-cap hard and brittle, though of normal thickness. Arachnoid sac contained more fluid than usual. Pia mater infiltrated with thick, and in some spots partly coagulated, serum. Ventricles distended by turbid serum. Fornix and septum lucidum reduced to pulpy state.—*Chest*: Heart small, and several white spots on surface of right ventricle. Black patches on pulmonary substance of left lung, which was soft, and emitted an offensive odour.

No. 105.—M., æt. 37. In hospital seven weeks.—*Head*: Dura mater very firmly adherent to bone. Vessels of both extremely turgid, and skull-cap heavy. Slight general thickening and opacity of arachnoid.—*Chest*: Left lung in congestive stage of pneumonia, dark, livid, and almost black coloured. Old adhesions of right lung, but less diseased than left.

No. 106.—F., æt. 45. In hospital thirteen years and five months.—*Head*: Cranial bones adhered firmly to dura mater, portions of latter being torn on removing skull-cap. Arachnoid partially opaque. Slight infiltration of pia mater. Cerebral substance soft. Lateral ventricles dry, and contained no fluid.—*Chest*: Trachea red, and bronchii congested. Lungs partially solidified, inflamed, and an abundant yellow coloured fluid, resembling pus, flowed from cut surfaces. Several puckered citatrices upon upper surface of right lung.

No. 107.—F., æt. 70. In hospital two months.—*Head*: Cranial bones paler than usual, and contained little blood. Dura mater purely white. Sac of

arachnoid dry, and membrane perfectly transparent. Cerebral substance soft, and no fluid in lateral ventricles.—*Chest*: Old adhesions of pleura; right lung congested, and broke down under pressure. Bronchii inflamed.—*Abdomen*: Light fibrous tumours, from size of pea to a marble, attached to peritoneal surface of uterus.

No. 108.—M., æt. 45. In hospital three years and six months. *Head*: Dura mater adhered so firmly to bone, that it was torn in shreds by separating skull-cap. Arachnoid opaque, especially on longitudinal fissure. Pia mater moderately infiltrated. Cerebral vessels fuller than natural, and gave cut surfaces of brain a purplish hue. About an ounce and a half of fluid in lateral ventricles. Brain firm.—*Chest*: Traces of old tubercles in both lungs.—*Abdomen*: Ilium, colon, and rectum dark-coloured. Mucous membrane converted into soft, blackish-brown substance, and whole structure appeared partially disorganized.

No. 109.—F., æt. 67. In hospital twenty-six years and five months.—*Head*: Skull-cap of dull and somewhat livid colour throughout, from fulness of vessels. Bloody points on cut surfaces of brain conspicuous, and slight increased quantity of fluid in ventricles.—*Chest*: Space occupied by heart and pericardium twice usual extent. Serous effusion into pleural cavities. Lungs compressed and hepatized. Three or four ounces of serum in pericardium.—*Abdomen*: Liver small, and nutmeg-coloured. Gall-bladder large, and full of bile.

No. 110.—M., æt. 33. In hospital three years and five months.—*Head*: General fulness of external and internal vessels. Much blood escaped on dividing scalp and opening skull. Bone of dull red colour, dense, and heavy. Light serous infiltration of pia mater. Increased quantity of fluid in ventricles.—*Chest*: Heart and pericardium greatly increased in size, being equal to that of a bullock; and cavities much distended with coagula of blood. Mitral valves thickened, diseased, and edge ossified. Lungs condensed.

No. 111.—F., æt. 46. In hospital twenty-six days.—*Head*: Skull-cap thin and pale. Vessels of brain turgid throughout. Lateral ventricles large, but did not contain much fluid. Fornix raised, so that two cavities communicated by circular opening.—*Chest*: Heart large, and pericardium distended by considerable quantity of opaque, slightly yellow fluid, containing soft fibrine. Serous surfaces of pericardium covered universally with layers of fibrine.—*Abdomen*: Each ligament of uterus presented a cyst; that on right, the size of orange, the other of hen's egg; both filled with thick dark substance the consistence of tar, but not viscid, and considered blood. Two large and two smaller fibrous tumours in uterus.

No. 112.—F., æt. 58. In hospital eight months.—*Head*: Skull-cap heavy, yet easily separated from dura mater. Arachnoid transparent, but raised over whole upper surface of left hemisphere by extensive extravasation of blood in pia mater. Section of brain showed also considerable extravasation in substance. Thick black grumous layer of blood under tentorium cerebelli, extending along medulla oblongata and upper part of spiral chord, which were encased everywhere in clot. Right lateral ventricle contained much serous fluid. Upon surface of hemisphere, and into substance, smaller extravasation of black clotted blood were noticed.—*Chest*: Adhesions of both lungs to parietes. Heart hypertrophied, and left ventricle dark-coloured.—*Abdomen*: Old adhesions of peritoneum. Both kidneys atrophied, but left much more than right.

No. 113.—F., æt. 53. In hospital fourteen years and six weeks.—*Head*: Cerebral convolutions shrunken, leaving considerable spaces between, where pia mater was infiltrated with transparent straw-coloured gelatinous fluid. Whole substance of brain pale-coloured. Much serous fluid in base of skull after removal of brain. Choroid-plexus contained scarcely any blood.—*Chest*: Adhesions of lungs. Masses of tubercles, softened, and formed into cavities.—*Abdomen*: Large slough in groin, which entered through parietes to a pouch

in iliac fossa that contained nearly three ounces of dark clotted blood. Cæcum adherent to parietes, whilst an opening, size of a pencil, communicated both with external slough and iliac fossa. Walls of ilium and cæcum thickened by tuberculous deposit. Canal so narrow, that a crow-quill could scarcely pass. Mucous membrane dark bluish-black coloured in various parts, and ulcerated. Cyst, size of a sparrow's egg, in right ovary, filled with coffee-coloured fluid.

No. 114.—F., æt. 80. In hospital forty-six years and eight months.—*Head*: Brain of moderately firm consistence. Convolutions atrophied, inter-spaces being filled by clear serous fluid.—*Chest*: Cavity of thorax much deformed. Adhesions of left lung to parietes.

No. 115.—M., æt. 43. In hospital five months and ten days.—*Head*: Brain bulged over sawn edge of bone. Cerebral vessels large, and full of blood; ventricles contained moderate amount of serous fluid. Thin layer of recently effused soft yellow lymph on middle fossa of skull; also cerebellar fossa, and upper process of basilar process. Dura mater, in these situations, greatly injected with blood.—*Chest*: Pericardium inflamed, which extended to left lung. Pulmonary substance universally dark coloured, and contained numerous circumscribed abscesses, some large as walnut, mortified, and emitted a strong odour.

REMARKS.

Considered in the aggregate, the one hundred and fifteen dissections, described in the previous synopsis, clearly show that, in addition to decided morbid alterations of structure observed in the brain and its membranes of each case, ninety-nine patients, or more than four-fifths of the entire number, also manifested distinct marks of disease in one or more organs of the chest; whilst fifty-seven individuals, or half of the whole autopsies, likewise exhibited pathological changes, more or less extensive, in some of the abdominal viscera. Many of the cases I have now detailed are exceedingly interesting, and amply illustrate the morbid appearances usually met with in persons who died whilst labouring under mental alienation; although, in a large proportion of the cases described, the immediate cause of death seemed more owing to physical disease, especially affecting the thoracic contents, than to their attendant mental malady. Indubitably, the pathological appearances briefly detailed in the present communication would have proved much more instructive, had an outline of the chief symptoms, characterizing each patient's previous disease, been also appended, in order thereby to connect former psychical phenomena with subsequent morbid changes in the encephalon; and thus have endeavoured to point out, notwithstanding the known difficulty of all such attempts, how different phases of insanity more likely affect certain parts of the brain than others; in fact, to localize within that organ, if such were possible, the various forms of mania.

Considering this inquiry requires much greater experience than the present data yet supply, instead of pursuing such a difficult subject any further at present, I would now remark, respecting the pathological appearances met with in the one hundred and fifteen autopsies reported, that effusion of serous fluid into the ventricles was more frequently observed than any other morbid appearance; eighty-seven instances having been recognised. Infiltration of the pia mater ranked next in frequency; of which eighty-one examples are recorded. Turgidity of the bloodvessels of the brain and membranes follows afterwards, fifty-seven cases having been so enumerated. Besides the above instances of augmented serous effusion in the ventricles, thirty-four cases also showed an increased quantity of fluid collected at the basis craniid after the brain was removed. In twenty-eight patients, the dura mater adhered so firmly to the cranium, that this membrane was torn into shreds, and often very extensively, when separating the bone. Bloody points were noticed very numerous on the cut surfaces of the medullary substance in nineteen cases. The cerebral texture appeared firmer than natural in twenty-one persons; whilst in sixteen, the brain felt softer. In nineteen instances, the convolutions were shrunken;

but on the other hand, in fifteen they seemed compressed or flattened. Effusion of blood, more or less copiously, had taken place into the cavities or texture of the medulla; whereby death, it may be hence reasonably assumed, was mainly produced. In eight individuals, the brain had become so enlarged in size for its containing cavity that, this organ bulged over the serous edges of the cranium, immediately upon the skull-cap being removed; whereas, in eight other cases, the bloodvessels were to a great degree, if not altogether, empty. Although not numerous, several examples, where the cerebral substance was altered in colour from its natural hue, were also recognised. Thus, in seven cases, the brain was changed to a pink hue, more or less pronounced; two appeared red; one was purple; one yellow; and in eight examples the medullary substance seemed much whiter than ordinary. Other important morbid alterations of structure, besides those now specified, are also noted in the synopsis, respecting which I would, however, only farther observe, before concluding this part of my subject, that in six autopsies the foramen of Monro was so much enlarged as to make a direct communication betwixt the two cavities.

Besides the above appearances, in a few cases an unusual dryness, and even a total absence of all moisture, between the cerebral membranes and its contents, was also remarked; and in several a soft yellow lymph had been effused, as if from recent inflammation; whilst in one interesting case (No. 101), a brownish-red adventitious membrane—the size of a crown-piece—adhered closely to the dura mater, covering left posterior lobe of the encephalon. Lastly, in another equally curious instance of morbid change (No. 18), the brain had become greatly decomposed in its substance, emitted an offensive smell, and had almost approached a state of mortification. The bony structure of the cranium likewise varied, in numerous patients, from its normal condition; upwards of one-third, the entire number being of that description. Thus, the skull-cap was found unusually thick and heavy in nineteen cases. In five, it appeared preternaturally thin. In four, the inner surface had become uneven, rough, and projected. In three, it was shallow. In two, the bone seemed so dense that the diploe had disappeared. In one instance, the calvarium was very hard and brittle, but of ordinary thickness; whilst in another case (No. 56), the clinoid process of the sphenoid bone appeared so prominent, as to project near half an inch beyond its fellow, being, however, smooth, and crusted with cartilage.

As already stated, a very large proportion of the one hundred and fifteen dissections contained in this communication, besides diseased changes in the cranial contents, also manifested decided morbid alterations of structure of the thoracic organs. Amongst the ninety-three cases so distinguished, eighty-one autopsies showed marks of recent or former inflammation of the lungs or their membranes. In thirty-nine cases, the heart or its valves were diseased. In twenty-three, the lungs were tuberculous. In twenty-three, collections of pus—some being large vomice—had formed. In nineteen, serous effusion had taken place into the pleural cavities; and in sixteen patients the lungs had become gangrenous, which alteration was in some cases even extensive; besides eight examples, wherein there appeared well-marked incipient signs of mortification. This large number of cases, in which gangrene of the lungs had actually supervened, constitutes a most important peculiarity in reference to maniacs; and seeing it coincides with the experience of other pathologists, the above facts, therefore, become more instructive. Irrespective of those individuals in whom evident indications of mortification seemed only to have just commenced, the ratio of one case of gangrene in about seven dissections, constitutes a very considerable proportion; and irrefragably proves that, this form of diseased structure prevails much oftener amongst lunatics, than ordinary sick persons mentally sane. It likewise deserves special observation, that eleven of the cases occurred in males, whereas only five were females; which feature, therefore,

conclusively indicates gangrene of the lungs as more likely to affect the former than latter sex, particularly patients whose mental malady was of recent occurrence; since all, excepting two, of the above sixteen cases, were parties who had not been insane during any length of time previously.

Believing it superfluous to discuss in detail, the various pathological appearances observed in the abdominal viscera of the fifty-four lunatics enumerated and coming within this division, I will only briefly remark on the present occasion that, in nearly one half, or twenty-five patients, inflammation of, or ulcers in, the intestines were noticed; whilst two cases of the latter category terminated in actual perforation; whereby fecal matter had escaped into the peritoneum, and so caused death. In fifteen cases, the liver was diseased. In thirteen, inflammation of the peritoneum either recently prevailed, or adhesions of that membrane existed, but apparently of old date; whilst, in seven examples, serum was effused into the peritoneal cavity. Again, in eighteen female lunatics, the uterus was diseased, either from ulceration, the presence of fibrous tumours, or an affection of the ovaries; and lastly, in fifteen persons the kidneys appeared different, as to size or structure, from their natural condition.

Respecting several interesting peculiarities enumerated, in the general summary just given, of pathological alterations met with in the different bodies examined, I would here direct special attention to one or two features manifested by the above dissections, and from which some important practical inferences may be deduced. For instance, amongst the twenty-eight cases reported to have exhibited strong adhesions of the dura mater to the skull-cap—often so considerable as to cause that membrane to be torn into shreds, when removing the bone—twenty-two occurred in persons who had only recently become insane; the remaining six being chronic cases; whilst of these, seventeen were male, and eleven female, patients. Again, in the nineteen individuals whose skull-cap was thick and heavy, eighteen were recent examples of mental disease, with only one case which had been insane for a long period; amongst the former, seven being males, and eleven females. Of the five examples whose crania appeared preternaturally thin, four were recent cases, and one chronic; three being in males, and two in females. With reference to the altered consistence noticed in the brains of lunatics, whether firmer or softer than natural, it is important to mention that, of the twenty-one instances where the convolutions seemed unusually firm, thirteen were males, and eight females; whilst seventeen occurred in recent, and only four in chronic, cases of insanity. On the other hand, it should also be stated that, amongst the sixteen examples of softened convolutions, fourteen were recent, and only two were cases of long duration; one having actually continued an insane resident of Bethlem Hospital upwards of fifty-one years.

The additional point, to which I would lastly direct the notice of pathologists, is the proportion of cases where the convolutions of the brain seemed atrophied or shrunken. Seventeen such instances being recorded; of whom six were male, and eleven female, lunatics; eleven being in persons only recently insane, and six in parties who had been affected many years. Of the latter, three were females, one of whom had resided in the hospital upwards of fifteen years, one more than twenty-five years, and the third nearly forty-seven years: she being also in the eightieth year of her age. Again, as to the three males similarly affected, one had been an inmate upwards of six years, another more than twenty-nine years, and the last during thirty years. However, prior to deducing any inference respecting the greater frequency of shrunken or atrophied convolutions, in chronic than in recent cases of insanity, the fact should be always remembered that, as twenty-one dissections of the one hundred and fifteen now enumerated were made in patients who had been insane during many previous years, it hence follows, under one-third of those cases, which were of long duration, exhibited the morbid alteration now specified; whilst, among the remaining

ninety-four autopsies of lunatics recently affected, only eleven examples, or nearly one-ninth of the aggregate number, showed similar phenomena. From such data it consequently appears that, old cases of insanity are more likely to exhibit shrunken or atrophied convolutions, than patients recently attacked.

Speaking generally, I may say confidently, many of the dissections contained in the synopsis now published are both instructive and interesting illustrations of the pathology of mental diseases. Two autopsies being however rather remarkable, as well in regard to the morbid changes of structure noticed after death, as also on account of their other features, therefore merit particular attention; more especially, seeing each case constitutes an example of suicide effected in an unusual manner; one, indeed, being almost without parallel in the annals of medicine. The first to which I would direct attention is No. 51 in the synopsis. This patient—a female—laboured under mania, and remained in Bethlem Hospital about one month. The present attack was not her first, having been insane about two years previously. She was suicidal, and had become recently again affected after the birth of a child. Was always hasty in temper, and although formerly of temperate habits, had recently, according to the report of friends, taken often to drinking; also fancied herself a person of title, and believed she ought to inherit considerable property. On admission, this lunatic was flighty, wild looking, restless, and likewise talked of destroying herself. Appeared slovenly, dirty, untidy in person; and subsequently became very violent, spiteful, and mischievous. These symptoms continued with little variation till nearly one week before death, when an attack of diarrhoea supervened. This complaint had become, however, so much alleviated by opium, calomel, counter-irritation, and saline medicines that, the evacuations soon appeared perfectly natural; but although there remained still much debility, the patient now seemed greatly improved in physical health. This condition continued even to within one day of her dissolution, notwithstanding the mind appeared greatly disturbed, whilst she likewise became more flighty, restless, and mischievous than previously. Nothing remarkable, however, occurred until the morning of decease; when, after rising from bed as usual, she walked across the gallery; but having there met one of the nurses, was immediately led back to her sleeping apartment. While being so conducted, she felt faint, and would have tumbled, had it not been for the support rendered by the attendant. The lunatic, however, rallied for a little, then began to ramble, talked incoherently, and in a few minutes afterwards fell dead without apparent suffering. In this insane patient, death was occasioned by pieces of a hair comb which she had, evidently with the intention of self-destruction, previously swallowed wholly unknown to any attendant, two bits of that female appendage having perforated the walls of the intestines, besides other portions of it also found in the ilium and cæcum, as already detailed in the synopsis.

The second case which I would now likewise bring under the reader's observation, is No. 15 in the list of dissections. This patient was a young man of good education, and who recently occupied the situation of clerk in a mercantile establishment. His friends reported the present attack was the first, that he did not seem suicidal, and had only recently become insane; whilst, the symptoms exhibited were, in every respect, those of decided melancholia. When admitted into Bethlem Hospital, the patient was very much depressed in mind, spoke of his ill-spent life and wickedness. Subsequently, he would often remain the entire day without taking any notice of other persons in the ward, or of passing occurrences; seldom talked, and seemed regardless of cleanliness or the calls of nature. In this apathetic condition he remained during five weeks; when, having first borrowed a common sewing needle from another inmate upon some frivolous pretext, he then thrust it into his left side, between the nipple and sternum, adjoining the fourth and fifth ribs; where, on a careful local examination, a small puncture was visible. Being soon afterwards visited by the resident

medical officer, the sufferer stated what had occurred, and also acknowledged that his purpose in committing this act was to kill himself. On making inquiry respecting the symptoms, he further said, his heart quivered on being pierced by the needle, and that he still felt the instrument in that organ when breathing. For some time subsequently, the patient appeared free from pain; but very often became excited, refused to take food, and also appeared quite different from his former depressed condition, frequently talked at random, and continued restless during the night. Two days after the accident, general constitutional disturbance supervened; the pulse then became one hundred and thirty, his skin hot, and tongue white, the respiration being weak, and principally abdominal; he also moaned much, whilst the slightest pressure on any part of his thorax could scarcely be borne. Notwithstanding the small quantity of nourishment recently taken, no indication of physical weakness was apparent; the party could sit up, and even turned himself without any difficulty, or appearance of suffering, till the morning of his decease. During all that day, however, he continued very restless, being seldom ever quiet for a minute at a time; the pulse now became scarcely perceptible, but still reached one hundred and thirty, and was very feeble. About a quarter of an hour before death, he sat up in bed, swallowed some jelly, appeared in some degree even comfortable, and then calmly expired a few minutes afterwards. In spite of every effort zealously made by Mr. Lawrence to extract the needle in the first instance, as also by Dr. Monro and Dr. Wood to alleviate the consequent symptoms, all treatment proved wholly ineffectual, and this unfortunate patient died at the end of four days, after having pierced his heart and pericardium with the needle already mentioned, which had perforated the left ventricle, as described in the statement given of the morbid appearances.

Both the above cases are exceedingly instructive; not only in reference to their pathological aspects, but as further showing the necessity of constant superintendence, lest lunatics should intentionally injure themselves, even where no suicidal propensity had been suspected, or manifested previously. Too much surveillance can never be exerted towards insane patients: seeing, the greatest cunning and ingenuity is often employed to obtain possession of any instrument capable of inflicting bodily injury. The second case of suicide here reported, and in which the lunatic actually terminated his own mortal existence by a common sewing needle, is both curious and interesting, independently of its pathological importance. In fact, the chief circumstance described would almost seem to realize Shakespeare's poetic allusion to self-murder, in the well-known soliloquy of Hamlet, where the Prince says, "when he himself might his quietus make with a bare bodkin." This quotation from the great dramatist seems almost applicable to the tragic occurrence now detailed, and is remarkable; whilst I am led to fear, the case related is not a solitary instance, seeing the hackneyed quotation here given often takes hold of the excited imagination of persons in this country. That murder has even been perpetrated by adopting the mode described in the above case I can readily believe; indeed, an example perfectly parallel, both in regard to the instrument employed and the fatal result, occurred some years ago near Gottenburg, in Sweden, where, a M. de Lacroix murdered his first wife, and then a second he had afterwards married; both diabolical deeds being accomplished by the identical instrument now mentioned—viz., an ordinary sewing needle. Having been put on his trial, M. de Lacroix confessed, that in the dead of night, when the fair victims were asleep, he thrust a needle into the heart of each, whereby death almost immediately ensued; and as he carefully wiped away any blood which oozed from the slight puncture thus made, all trace of bodily violence was easily effaced. Such terrible tragedies as those last quoted, although not of pathological interest, being nevertheless, in many essential bearings, illustrative of a new mode whereby the life of a fellow-creature is sometimes suddenly cut short by crimi-

nals, or by insane persons upon themselves, I trust this digression, notwithstanding it may perhaps appear to some readers rather foreign to the present discussion, will not be considered wholly irrelevant.

Before bringing these remarks to a close, I would further repeat that, the following is an epitome of the morbid appearances met with in the one hundred and thirteen dissections now communicated. In eighty-seven patients who died insane, effusion had taken place into the ventricles. In eighty-one, the pia mater was infiltrated. In fifty-seven, turgidity of the brain and membranes was observed. In fifty-five, the arachnoid coat had become thickened and opaque. In nineteen, the colour of the brain appeared altered from its natural hue. In nineteen cases, also, bloody points were both large and numerous upon the cut medullary surfaces; whilst, in ten instances, blood was effused—even sometimes to a considerable amount—within the cranium, and evidently acting as the immediate cause of death in these patients. According to the above summary it therefore appears, first, that effusion of serum into the ventricles, secondly, infiltration of the pia mater, and thirdly, turgidity of the bloodvessels of the brain or membranes, are the chief and most common diseased alterations of structure, which pathologists may confidently anticipate in the great majority of patients who die whilst labouring under mental alienation.

APPENDIX.

Since the previous communication was written, several additional autopsies have been made at Bethlem Hospital, which I would therefore append. Like those already detailed, they possess considerable interest; and as a short statement of the prominent symptoms observed during their former mental malady is also added, these dissections therefore become more worthy of perusal. In the synopsis similar details did not accompany each case, chiefly because my communication might have thus extended to a greater length than seemed desirable. Such omissions indubitably diminished the value of various narratives then given, but which does not characterize those I have now subjoined. As already remarked, however useful it would become for practical physicians to know, beforehand, the precise portion of an insane patient's brain which may be affected by morbid changes of structure, when particular mental phenomena prevail during different forms of mania, hitherto, not much progress has been made in this department of psychological knowledge. Nevertheless, being anxious to promote, even partially, so important an inquiry, I am now induced to supply the following short contribution, although it may, perhaps, seem to contain, in some respects, rather limited information.

No. 116.—M., æt. 48. In hospital thirty-nine days.—*Head*: All the vessels of brain and membranes filled with blood to minutest ramifications. Slight partial opacity of arachnoid, and some infiltration of pia mater. Fluid of ventricles rather beyond normal quantity. Effusion of blood in cerebral fossæ of basis of crani, sufficient to cover thereby lobes of cerebellum, and to line corresponding part of arachnoid with a layer of coagulum. Similar effusion, but to much less extent, on a small part of each cerebral hemisphere.—*Chest*: Posterior portion of left lung highly congested, and contained but little air.—*Acute Mania*: Very violent on admission, being brought to Bethlem confined in a strait-waistcoat, and with fastenings on his legs. Was exceedingly incoherent; frequently alluded to the war with Russia, and that he would kill the enemy. Speaks of his own great personal strength, butts his head against objects, kicks, strikes, and attempts to bite other persons indiscriminately. Is most destructive of his clothes, and even destroys in a day three or four suits of canvas; always very dirty, and continued nearly constantly most incoherent. Latterly the patient became weak, took food very indifferently, having scarcely strength to swallow a single teaspoonful of any liquid, even of brandy, which was ulti-

mately the only kind of support or nourishment taken, until he died quite exhausted.

No. 117.—M., æt. 55. In hospital five weeks.—*Head*: External vessels empty, internal full of blood. Very slight infiltration of pia mater. Bloody points on cut surfaces of cerebral substance.—*Chest*: Masses of tubercles in a crude state scattered through lungs; both divisions being also affected with recent pleuro-peripneumony, and which on posterior aspect was rather extensive.—*Melancholia*: Insane two months prior to admission, being often in a state of decided melancholy; refused food, and exhibited signs of committing suicide. When admitted, was much depressed in spirits, seemed very miserable, and soon afterwards appeared as if almost imbecile. Often stands helpless-looking in the ward, is frequently groaning, rarely if ever speaks, and never answers any question. Takes food with great reluctance, is frequently very restless at night, and sometimes exhibits nearly entire unconsciousness, which continued, with the other symptoms, till his malady terminated fatally.

No. 118.—F., æt. 37. In hospital ten days. On viewing patient's body, left breast was enlarged and livid; discoloration being at first supposed to have proceeded from effused blood, but it was found, on more minute examination, to be a considerable abscess, full of discoloured pus.—*Head*: External vessels quite empty, internal moderately full of blood. Pia mater infiltrated with perfectly limpid fluid in intervals of convolutions. Increased quantity of fluid in ventricles, with much also in and about velum. Substance of brain soft in central parts.—*Chest*: Old adhesions of right lung. Lower and back part of lower lobe of left highly congested.—*Acute Mania after protracted lactation*: Insane one week prior to admission, being then frequently violent, incoherent, and often swearing, although previously correct both in language and conduct. When admitted was very weak, blanched in countenance, and appeared to have suffered from very violent maniacal excitement, without her strength having been supported by sufficient nourishment. After admission, felt great reluctance to take food, which aversion soon became so marked that, afterwards she had to be almost forced to swallow whatever passed her lips. Subsequently, the poor sufferer became too feeble to be noisy, but continued always very restless, and did not remain a moment in one position. Having constantly great objections to take, not only solid, but even any liquid food or drink, she was therefore forced to swallow beef-tea and wine as support. Ultimately, the patient got very feeble, her pulse being scarcely perceptible; and at last she expired in a state of complete exhaustion.

No. 119.—F., æt. 45. In hospital nine days.—*Head*: Skull-cap thin and pale. Dura mater quite detached from bone. Substance of brain softer than natural, and septum lucidum broken through.—*Chest*: Adhesions of left lung, which was dark-coloured, and full of blood in posterior parts. Heart flabby, and of yellowish colour.—*Acute Mania*: Insane five months prior to admission, a brother being also affected with mental disease, and her malady reported to have been augmented by attending several theatrical performances, and she threatened to injure relatives. On admission was incoherent, very excitable, often excessively violent, and rambled in conversation. These symptoms continued without much abatement during the time this patient remained in hospital, and till the morning of her decease, when she was found dead in bed, as if asleep, but lying in a position indicating perfect repose. There appeared no contortion of countenance, and the body was pallid.

No. 120.—F., æt. 22. In hospital six weeks. Corpse extremely emaciated, and the whole surface, both of trunk and limbs, exhibited a dusky red or blackish hue. *Head*: Membranes of brain very full of blood. Dura mater of a light pink colour. Vessels under arachnoid full of blood. Numerous dark spots on cut surfaces of cerebrum. Brain rather above normal consistence, and about a dram of serous fluid in ventricles.—*Chest*: Both lungs contracted

towards posterior part of cavity. Muscular substance of heart discoloured, the whole organ being soft, flabby, and contained a quantity of dark fluid blood.—*Abdomen*: Viscera soft, and in partial state of decomposition. Entire ovarian apparatus appeared shrunken and bloodless. *Dementia from Masturbation*: Father and brother of this patient were also insane. She has attempted suicide, and has laboured under mental disease during seven months prior to admission. Is said to have eaten her excrements, often tears her clothes, and frequently gets violent from religious excitement. Having been brought up with the expectation of inheriting a fortune, she became much depressed when reduced to poverty. Soon after this unfortunate event, symptoms of mental aberration first appeared. On admission, her person was thin and emaciated, habits filthy and indecent, whilst no feelings of modesty or delicacy prevent her indulging anywhere, or at any time, in those bad propensities to which she is addicted. Occasionally talks rationally, but very soon afterwards thinks the devil is going to take her to hell; appetite is voracious. Sleeps well. Soon afterwards became much more excited and restless than before, as likewise more dirty. Required being carefully watched to keep her in bed, as she bruised herself from rolling about and by constant contortions. Ultimately, extreme debility supervened, and she became quite exhausted previous to death.

No. 121.—M., æt. 44. In hospital eight years and nine months.—*Head*: Vessels of brain and membranes distended with blood. Pia mater moderately infiltrated. Increased quantity of fluid in ventricles.—*Chest*: Right lung full of small tubercles, with also numerous vomicae. Left lung attached extensively to parietes by strong adhesions; unattached portion being covered by a thick stratum of whitish tolerably firm fibrine, not organized. A few ounces of fluid in cavity. Posterior part of upper lobe in congestive state of inflammation. Lower lobe partially consolidated. Pericardium closely adherent to heart throughout entire surface; membrane being considerably thickened and indurated.—*Abdomen*: Colon descended to brim of pelvis, and was in contact with symphysis pubis, it then passed to left hypochondrium, from whence the intestine afterwards pursued its regular course.—*Melancholia*: Disease hereditary; his grandfather having been also insane. Is suicidal, and has attempted to drown himself. When admitted, believed all food given him was human flesh and blood, that he formed one of the Trinity, and therefore, had become a divine personage. Mind weak, if not imbecile; and although rather clever as a designing artist, when asked to employ himself in any useful manner often replied: "If sufficiently well to work, I am, therefore, well enough to be set at liberty." This patient continued much in the same state till his death, which ultimately arose from pectoral disease as shown by the autopsy.

No. 122.—M., æt. 34. In hospital eleven days.—*Head*: Brain firm, and vessels somewhat fuller than natural. Several opaque spots on arachnoid. Cerebellum softer than natural, and lay in a quantity of turbid serous fluid, which seemed to fill whole vertebral canal.—*Chest*: Left lung slightly adherent at upper portion, and presented a dark bluish-black hue, over whole posterior and lower surface. Cut surfaces nearly black, and structure friable; organ in last stage of congestive pneumonia, and reduced, in many parts, to a dark brown coloured semi-fluid substance of offensive odour. Right lung extensively mortified. About a pint and a half of serous fluid in pleural sac.—*Abdomen*: Gall bladder distended. Small intestines, dark coloured, with a thick black fluid matter effused on mucous membrane, and resembled that which could be squeezed from disorganized lung.—*Mania*: Insane ten days prior to admission, but had been similarly affected on two previous occasions. Is now exceedingly restless, and labours under great excitement, although in a very debilitated physical condition. Seems quite regardless of the calls of nature. Particularly obstinate, and not only refuses all solid food, but even to take any liquid whatever, unless with the greatest difficulty. When the patient's name is pro-

nounced sharply, he sometimes moves his head slightly, as if recognising the sound; but he can never be made to speak. Bowels very constipated. Two days after admission, during an attack of great excitement, had contortions of limbs, became very restless, could scarcely be kept in bed, shouted much, and used most indecent language, his pulse being also at this time almost imperceptible. Next day, he appeared quite unconscious, and would scarcely take nourishment. Although labouring under pneumonia, it was only towards the latter days of patient's life that any symptoms of pectoral disease seemed to supervene, a dulness being then discovered on percussion over the posterior part of right lung. He had no cough, and appeared altogether free from pain in chest.

No. 123.—M., æt. 27. In hospital six years and thirty weeks.—*Head*: Brain firm and white. Anterior lobes flattened. Supra-ventricular mass of cerebral matter below average in quantity, and shrunken.—*Chest*: Pericardium contained large amount of turbid serum; also a considerable quantity of serous fluid in pleural cavities. Left lung studded with opaque softened tubercles. Adhesions of right lung, and a large irregular cavity in substance.—*Abdomen*: Two tubercles in ilium. Mesenteric glands larger than natural, with serous fluid effused in peritoneal cavity. Kidneys small and flat.—*Melancholia*: Incurably insane for some time prior to admission; disease being originally caused by over study, and reported a suicidal patient; seems exceedingly depressed and dull, is weak in body, and much out of health. Has a rather prominent eye, which he generally keeps directed downwards. Appears very timid; avoids notice by other patients, and seeks retired corners, as if anxious to hide himself from observation. Does not relish any kind of employment, and is disinclined to every species of bodily exertion. Exceedingly restless at night; and takes food indifferently. Is reported to have made frequent attempts to strangle himself, as also to cause death by swallowing stones. Believes he has been unjustly excluded from all religious society, the people about him being quite changed, and that his mother is Catherine de Medicis. Before decease, became greatly emaciated.

Believing it superfluous to make lengthened commentaries upon the eight autopsies now appended, I will therefore only remark that, they constitute instructive illustrations of the varied forms of insanity usually met with in practice. Instances of violent mania have been thus recorded, as also of melancholia. Mania following protracted lactation, and dementia from masturbation being likewise described. Besides these examples, the interesting case of gangrene of the lungs will repay perusal; more particularly, since scarcely any symptom of the extensive pectoral disease actually existing could be distinctly ascertained during life, but which peculiar feature often characterizes this morbid change of structure as observed amongst insane persons, if compared with ordinary patients. Lastly, the case of chronic melancholia, with which the present series concludes, specially merits notice, seeing it furnishes another illustration to those previously given, of a rather common occurrence in persons long insane—viz., where the cerebral matter appeared below an average quantity and shrunken.

A VISIT TO THE AMERICAN STATE SCHOOL FOR IDIOTS.

(From the New York Tribune.)

A FEW years since, the country people in the neighbourhood of the old Bull's Head Tavern, on the Troy road, when they were told it was to be fitted up as a school-house for idiots, shook their heads, and pretty generally agreed that folks who thought natural fools could be taught anything were but little better than natural fools themselves.

The school was opened, however, and has gradually risen in popular favour, until now the old Bull's Head has got too small to accommodate the large

number of pupils for whom applications pour in from all parts of the State. The State, to whom no small portion of the credit of making the experiment belongs, is now erecting a large asylum at Syracuse, where the purposes of the institution can be more fully and effectively carried out.

The present building stands a little out of the city limits, a few rods back from the turnpike. It is a plain, unpretending brick house. Inside, it looks very much like any other boarding-school. If you visit it to see its operation, Dr. Wilbur takes you first into a small building, disconnected with the main one. This room you at first, perhaps, conjecture to be a gymnasium, for two ladders run up to the ceiling, while a third is laid across, horizontally, connecting them, and under it is a mattress. There are two square tables, around which are seated perhaps a dozen boys and girls, of six to sixteen years old, apparently playing with the blocks, coloured balls, printed cards, &c., that lie on them. A young man at one, and a young woman at the other, are talking to the children constantly in loud, but cheery, kindly tones, as if stimulating them to go on with their work, or plays, or whatever it is. The pupils do not have the vacant stare, nor the low retreating foreheads, nor exhibit the personal neglect you expected. One or two have unprepossessing faces, and three or four are cross-eyed, but nearly all look intelligent, and all are neat; some quite pretty. You are a novelty to them, and they follow you with gratified eyes, most of them laughing heartily. This is the first indication they give you of being idiots, for were they sane and sensible, they would understand that visitors are not always a matter of rejoicing.

These are the newest comers. Here are one or two, as yet scarcely taught even to use their senses. That girl's eyes wander restlessly over everything in the room, but wave your handkerchief before them, and she will never notice it, or separate it in her vision from the mass of objects that flits before her dull comprehension. Shout at that boy's ear, and he will hardly pay more attention to it than a post. Put an icicle, or red-hot coal in his hand, and he would scream with pain, but he would not know enough to turn his hand over to let it drop. Throw yonder club at him, and he would not lift a finger to save himself, but would laugh insantly as it struck him down, and never knew what hurt him. A desperate task, indeed, to teach these eyes to see, ears to hear, and benumbed brains to think.

The teacher hangs one of the boys on the ladder by the hands. He has but to let go to drop a few inches upon the soft bed underneath. But he has no sense to teach him that. He clings tightly to the round, and perhaps cries at the pain the act gives him, but he does not move. The teacher puts his arm round him and lifts him up, lifts his hand, places it on the next round, and cheers and encourages him in a kind, loud voice. Then the other hand. And so, after repeated lessons, it is at last almost forced upon his sluggish mind, that he can use his hands and feet to reach the floor.

Another, who has been some months at the institution, is called to show his acquirements. His delight runs over out of his eyes, and he breaks into a broad grin at the opportunity. He runs up the ladder, down it, under it, over it, backward, forward, head foremost, feet foremost, and finally throws himself into the teacher's arms, with an exulting burst of irrepressible laughter. He has been taught to do only what can be taught to dogs and cats; but, with less natural intelligence than they, it is a wonder that he can be taught at all.

Another means of rousing and fixing the dormant faculty of attention is by throwing from hand to hand a stick, as boys play "catch." Two who have become expert at this engage in it, with a nervous straining of every muscle, that denotes what a tremendous mental effort the simple act requires, when such intellects are called upon to perform it.

The little circle around the first table are being taught to put, first one white, then one red bead, alternately, upon a string. Then two white, and

two red, &c. They do not learn it immediately, nor in an hour, nor a day, perhaps not a week, or a month. But when they *do* learn, they have gained an idea of *number*—the first in all their lives. And when they have learned it—such extravagant joy! When an idea does enter their poor darkened brains, it is like the thought that occurred to the Greek philosopher in his bath, making him leap out, half-dressed, and run through the streets, shouting, "Eureka!"—"I have found it!" Nowhere is there a pupil that is so grateful to you for a new thought as this poor idiot, that has never learned the use of thoughts at all.

Thus the system proceeds. It begins with the simplest of all impressions—the very foundation. Here is a row of circular blocks of different sizes, and there is a row of holes, into which they respectively fit. The idiot is taught to put each in its appropriate place, and thus he makes his first *comparison*, and gets his first idea of *size*. There is a set of red, green, blue, yellow, and white balls and cups. To fit each ball to its proper cup leads him to a comprehension of differences in *colour*. Another set of various shaped blocks teach him form.

When he has advanced thus far he can be taught to recognise a word printed on a card. But he recognises it as you do a face, by its general aspect, not by its component parts. Upside down or right-side up, it is all the same to him. By degrees, he is brought, first to know its meaning, then its separate letters, and then to trace it on the black board. When he can do this, he has reached the threshold on which ordinary children stand when they first go to school. Thenceforth his education is much like theirs, only requiring infinitely more patience and perseverance and gentleness.

Next you pass into the main school-room, where two dozen or more are assembled. Some are sitting at their desks and books. At one end of the room is a class spelling simple words, and at the other, another class, naming places, as they are pointed out on an outline map. The studies are like those of other schools, but not so the pupils. Time after time do the listless ears turn away, and the dull eyes stare in vacant stupidity. But the teacher's whole heart seems to be set on making them comprehend—she rouses, questions, answers, encourages, smiles, nods, and commends, in rapid succession, and with unflinching, gentle patience. "Now, Eddie!" "Quick, Fannie!" "Spell it, dear." "Think, Harry, that's a good boy!" "You can tell *that*, Kitty,"—patting one on the head, smiling encouragement to the other, and clapping her hands to arouse the attention of a third—for all the world as if they were sound asleep, and she was bound to force the information into their drowsy ears and out of their sleepy mouths in order to wake them up. Sound asleep they are, intellectually, and so they would remain, if her look and voice were not every moment reiterating something to arrest and fix their irregular, wandering train of thought.

At last the slow, hesitating answer comes, given with a trembling eagerness of manner, but with the imperfect lisp of early childhood, for few of the idiots, when first brought here, can speak distinctly. Great is Eddie's triumph if the answer happens to be right. Besides the commendations of the teacher, the whole class beams with sympathetic exultation; for in these simple natures there is an implicit, trusting confidence and lack of jealousy that we educated and wise people are strangers to.

Everything in the studies is made as simple as possible. When the name of an object is to be spelled, the object itself is shown, that they may understand the connexion between the word and the thing. Abundance of pictures, maps, globes, and models illustrate the geographical and historical lessons. In short, no pains are spared to strengthen the two faculties, especially weak in idiots—*concentration* and *conception*.

Pass now into the last room. At the black-board a boy of ten is copying an

outline drawing with remarkable fidelity. Another will write his own name, and yours, if requested. Another is performing a difficult sum in long division. Here is a girl of fourteen who cannot speak the simplest word without more exertion that it would cost you to halloo across the street, yet she will name the different countries as you point them out on an outline globe, describe their inhabitants, productions, and physical condition. There is a boy who, besides his idiocy, was pronounced deaf and dumb from his cradle, and came here from the Asylum for Mutes; yet, in less than three years, he has learned the elements of English grammar, and will parse you a sentence and give the syntax. And here is another little fellow with a paralysed arm, who can set down and work out an algebraic formula better than most boys who possess all their faculties. When the idiot can master grammar and mathematics, it is clear that he is an idiot no longer. He can carry out a train of reasoning and reflection, and Plato and Newton had no different process whereby to attain the greatest philosophic truths.

It seems strange, and yet it strikes you that somehow these advanced pupils have a more staid and sober look than those whom you saw at first. But so it is. As they exchange a mere animal nature for a human one, they gradually lose that perpetual manifestation of glee so characteristic of idiotcy. It is not that they have made intellectual progress at the expense of physical, for they are plump and rosy. It is not that their development, opening as it does, sources of enduring and deep happiness, has made them grave. But it is because a wise Providence partially compensates the poor unfortunate who lacks everything else, by the pleasing, ludicrous images that occupy his vision, and dance in perpetual succession before his bewildered brain.

Of course, while the education of the intellect goes on, that of the moral sense is not neglected. Moral duties are inculcated at each step, and such spiritual truths taught as can be made comprehensible.

The physical teaching and exercise are not the least important part of the school. From being helpless, brutish almost in habits, they are taught to stand, to sit, to walk, to use their hands, to feed themselves, to take care of their persons and clothes, and to conduct themselves like other reasoning beings. One exercise in which the boys take an especial delight is the military manual, which they go through with at the word of command, drawn up in a line, with mimic guns. Sometimes the company is put under command of one of their own number. In the summer they work in the garden, &c.

At meal-time they enter the dining-room quietly and in order, and find and take their own seats. If you look in upon the row, with their neat aprons, clean faces, and smoothly brushed hair, sitting patiently and decorously until they are helped to the dishes before them, you would hardly believe that they belong to the wild, uncontrollable class of beings that are commonly known as idiots.

That the discipline is firm and strict, you cannot but believe, on seeing these effects of it, and on watching the ready obedience yielded to the teachers. Yet that it is marked by parental gentleness and kindness cannot be doubted, when you see with what eagerness they comply with their teachers' wishes, with what satisfaction they receive their approval, how they turn to them in every difficulty or fear, and what affectionate regard they exhibit for each and all of them. One of the teachers told us she found them (saving lack of comprehension) easier to manage than other children of their age. Certain it is, that few schoolmasters can enter their recitation-rooms, assured of so joyful and affectionate a reception as that which greets the entrance of Dr. Wilbur. Not only the State, but the world, owes him a debt of gratitude for his successful experiment, which we trust is yet to be the means of lifting up into the scale of humanity many a poor being hitherto left in mental darkness and bodily misery.

MEDICO-LEGAL JURISPRUDENCE.—IMPORTANT TRIAL.

HIGH COURT OF JUSTICIARY, EDINBURGH.

WILFUL FIRE-RAISING.

THIS Court met for the trial of Dr. George Lillie Smith and Robert Campbell, for the crime of wilful fire-raising, at Haughs of Kinnaird, near Brechin.

The Lord Justice-Clerk, Lords Cowan and Deas, were on the bench. The Lord Advocate and Mr. Donald Mackenzie conducted the prosecution; the Dean of Faculty, Mr. David Mure, and Mr. John Millar, appeared for Dr. Smith; and Mr. G. Patton and Mr. A. B. Shand for Campbell.

The prisoners were charged with having, on the 30th of September, or the 1st October, in or near the stackyard of the farm of Haughs of Kinnaird, parish of Farnell, Forfarshire, occupied by Mr. John Smith, wilfully set fire to one or more stacks of grain, by applying to them lighted matches or other ignited substance—the fire thus wilfully applied having taken effect, and burned the whole stackyard, containing altogether fifty-five stacks of grain.

The prisoner Smith is a man of florid aspect, and of middle age. The prisoner Campbell is an old man of simple appearance.

The pannels pleaded not guilty, and the case went to trial. A special defence was put in for Smith, that at the time of the fire he was insane; and for Campbell, that Smith was liable to get excited, and that his conduct under that excitement was calculated to alarm and overawe those with whom he came in contact.

Mr. John Smith, farmer, Haughs of Kinnaird, deponed—My wife lived apart from me for some time, but returned home in the beginning of September last. On the night of the 30th September, at eight o'clock, I was in my stackyard, when all was right. The household went to bed between nine and ten. I was awakened a little after one o'clock, and found the stackyard on fire. I found a number of the servants had already collected. I endeavoured to stop the fire, but did not succeed till all the stacks were burnt. There were fifty-one stacks and four small huts destroyed. I sent to Brechin and to Montrose for fire-engines. Brechin is about four miles distance. The steading is about two miles from the Bridge of Dun, and six from Montrose. Two engines came, and assisted in putting out the flames. There was about half a stack saved, but even it was much scorched and damaged. I estimated the value of the stackyard at that time at about 2000*l*. It would now have been worth considerably more, from the rise in prices. When I got up there was a slight wind blowing from the north-west. I think its direction became changed afterwards. The farm-steading stands between the house and the stackyard. There is only about three yards space between the steading and the stacks. The house is at the other side of the steading. I suspected immediately that Dr. Smith had set the stackyard on fire. He had sent a threatening letter to my wife some days previous.

The following letter was then read by the clerk of Court:—

“Monday, September 25.

“MY DEAR MRS. SMITH,—I still call you so for all the iniquity you have done me.

“I leave it to yourself to think. (I'll keep all my promises to you. I'll do nothing without telling you.)

“As to your return to Mr. Smith, I should have been as happy to give you my arm to go back as I was to lead you away had you told me. You have much to think of.

“All I ask of you is an interview with me, or write me. My intentions at

present are determined thereby. You know my proposed movements, but they shall be delayed according to circumstances.

"I have been ready to help you in trouble, but be assured I am as ready to act when I am opposed. I am not one that will be *shuffled*.

"I ask of you to write me first, and then give me an audience. If you do not do so, I shall have one perhaps less agreeable to you. As your friend, as I have ever been, I ask you to do so. Blame me not, but my blood is boiling, and retribution I shall have in one shape or another. I care not though this comes to his honour's hands—you may show it to him.

"Your happiness *depends on your answer to me*. I am not in trim to be trifled with, or *yet duped*.

"For all you have done against me, and insult offered me, I say

"My dear Mrs. Smith, ever your sincere friend,

"GEO. L. SMITH.

"P.S.—Give me an answer, or you shall everlastingly repent it. G. L. S."

On the back was written—

"I confess I walk out of the course of a gentleman in writing this, but it is only my regard for you that has caused me to do so. Recollect, for once and all, I am one *who will act as I say*. G. L. S."

That letter was brought to my wife by a girl named Clark, a daughter of Dr. Smith's housekeeper. Smith had a residence in Montrose, but he had been in Edinburgh most of the time my wife was there. During the greater part of last year I was not on speaking terms with him. I had reason to know, from the report of the person my wife was living with in Edinburgh, that Dr. Smith was displeased with her for returning to me. The policeman came down about two o'clock in the morning, and I told him who I suspected.

Cross-examined by the Dean of Faculty—I and my wife had been living in a state of separation previous to the fire. She had returned to me on the 1st September, after a separation of six months, by agreement. During that period she had been in Edinburgh. I have known Dr. Smith since he came to Montrose, seventeen or eighteen years ago. I have been intimate with him from the autumn of 1852 till we had a difference about the 14th January, 1854. During 1853, Dr. Smith frequently complained of being unwell, and appeared excited. At first I thought it proceeded from illness, and the state of his affairs; but latterly I ascribed it to his taking too much drink. I ascribe it to that cause now, more so than ever.

By Mr. Patton—I had seen Campbell either once or twice before. I never spoke to him. I saw him once in Dr. Smith's house.

By the Court—While in my house Smith had opportunities of getting drink without my knowing it. The sideboard was left open, he having complained of my wife for having locked it. I do not know of my own knowledge that he took drink from the sideboard, but when he slept in my house he got wine placed in his bedroom. He sometimes got into violent passions, and used very violent language. I would not say that these were the effects of drink altogether, but he complained of his being unwell, and I certainly thought he was taking too much drink, and that this was partly the cause of his violence.

By the Dean—He was living a considerable time in my house, from the 4th December, 1853, to about the 16th. He was suffering from ill-health. I insisted on Dr. Booth or some medical man remaining constantly with him till he got better. Before the 4th December, I had had a message from Dr. Smith that he thought he was dying. I went to see him. He pleaded with me to allow him to come to live in my house. I consented to his coming on the condition of his bringing his housekeeper to nurse him. I would not, on any account, permit my wife to do so. He is no relation of mine whatever. He came out to me on Sunday, the 4th, with Dr. Officer, his partner in business,

who went away again to Montrose. On the Monday I sent for Dr. Booth, and insisted on his staying with him. On the Friday following he came into the room in his night-shirt, while we were sitting at tea, and in an excited state. It was then that he swallowed several glasses of brandy, which we could not prevent him drinking. His medical man had wanted to confine him to six glasses a day, but he would not be limited to that. I afterwards found he was getting about a bottle and a-half of wine a-day. The next week, on a soothing diet, he got rapidly better, and by Friday following he was going about my stack-yard with Dr. Booth, shooting pigeons. Dr. Smith was married, and had been separated from his wife; and during his excitement he spoke much about that separation. It was in the preceding May he first told us of his separation from his wife, and it was about that time I began to think he was falling into habits of drinking.

Margaret Smith, wife of last witness—I have known the prisoner, Dr. Smith, several years. I had a dispute with my husband about the beginning of last year, and I went to reside in Edinburgh. While there I occasionally called to see Dr. Smith, as a friend. I went back to my husband in September. Dr. Smith did not know I meant to return. After I returned I got a letter from him by a daughter of Mrs. Clark. I gave it to my husband, and sent no answer. I got another letter on the Saturday night, two hours before the fire. I tore it up. Some of the pieces were preserved. These are the fragments of that letter now shown me. All I read was that he expected me to write to him again. I answered neither of the letters.

By the Dean—My acquaintance with Dr. Smith commenced about six and a-half years ago, after I was married. I have never noticed any change in his manners; he has always been the same ever since I knew him. He was allowed brandy, and generally drank his allowance, which was two glasses a-day, I think. When I saw him in Edinburgh, he complained of ill-health. He was at times excited, at other times not so. So long as I knew him, particularly for three and a-half years past, he was subject to fits of excitement.

By the Lord Advocate—I know Dr. Smith intended to go abroad while I was living in Edinburgh. He said he intended to apply to Government for an appointment. I did not know when he got one.

Alexander Officer—I have been partner with Dr. Smith in Montrose since July, 1853. I have known him for six years. Dr. Smith lived some time at Laverock Bank, Trinity. He had gone to London and returned to Montrose about eight or nine days before the fire. He expressed disappointment at Mrs. Smith having returned. On the Monday following he wrote a letter to Mrs. Smith, and read it to me. I advised him not to send it, but he did not take my advice. He told me he had been at the Haughs before writing the letter, but he did not say what he wanted, or if he had seen any one. He said Smith the farmer had endeavoured to injure him by imputations on his character. He said he wanted two questions answered—that he was determined to have them answered before going away. He used threats of revenge, but he did not specify what mode of revenge he would take. I heard of the fire at the Haughs, and that Mr. Smith had suspicions of Dr. Smith. I went with Mr. Smart to Noranside, and found him there with Miss Carnegie and Dr. Steel. Mr. Smart told him what suspicions were abroad. He asked him if the houses were burnt. Mr. Smart said they were not. He asked if Mr. Smith was burnt. Mr. Smart said he was not. He said it was perhaps as well, as burning was too good a death for him. He did not say whether he had done it. The same afternoon I was alone with Dr. Smith. He told me he had been at the Haughs. It was my impression that he meant the previous night. I advised the others who were there that Dr. Smith was in an unfit state to be at large. I said he would be apprehended on suspicion, even though innocent, and that the effects might be very bad on him. I recommended that, as he was to take a voyage at any

rate, he should go away immediately. It was ultimately settled he should go to Dumfries Asylum, or rather that he should go on a visit to Dr. Brown at Dumfries, with the view of being quietly conveyed there. I took Mr. Sommerville's gig to Montrose, where I packed up Dr. Smith's things, and addressed them in the girl Clark's name. He was to meet her at Coupar-Angus station. He was apprehended on the Monday in the Strathmore Arms, Coupar-Angus. Dr. Smith drank considerably. He first spoke of going abroad eighteen months ago. I recollect his receiving a letter from the Colonial Land Office in September, requesting him to present himself for examination before the Commissioners.

By the Dean—I was decidedly of opinion that Dr. Smith was insane. I had been acquainted with him about six years. I have treated him for congestion of the brain and disease of the liver. The latter disease was very severe, and I think it contributed to and aggravated his other complaints. He has been treated for the same complaints by Dr. Steel of Forfar and Dr. Booth. He had laboured under this illness since the spring of 1853. About December, 1853, there was an appearance of paralysis arising from that disease. In September we had a consultation with Dr. Christison, of Edinburgh, about him. We thought there was no hope of his recovery from the complaints under which he suffered. We expected his case to result in insanity. He was frequently in a state of great excitement, but sometimes very dull. The Smiths seemed to occupy all his thoughts. He took Mrs. Smith's part in her differences with her husband. There was nothing in these differences that would have excited any sane man in his position. Dr. Smith was in practice eighteen years in Montrose. For some time he had a great business, and was very much esteemed, and held several public appointments. For the last eighteen months he laboured under an affection of the mucous membrane of the throat and stomach, which caused blood to come out at his mouth. He was restless and suspicious. He said he needed to keep a sharp look-out, as parties were plotting against him. In this state of diseased mind he quarrelled with his wife, and separated from her.

By the Lord-Advocate—I understood Dr. Smith to accuse Mr. Smith of improper intimacy with his wife. I first formed the opinion Dr. Smith was insane in December, 1853. During these fits that came upon him I considered him insane. They arose from congestion of the brain, aggravated by disease of the liver. I don't think these fits arose from drinking, though they were much aggravated by it. I was aware of Dr. Smith having obtained an appointment. I never said to any one he was qualified to hold it. I have seen him tipsy three or four times, but he was not a drunkard.

Charles Sommerville, merchant, Montrose—I have known Dr. Smith since 1838, and intimately for the last ten years. He was generally a sober man, but in company he could indulge freely. I could scarcely say I had formed an opinion of his sanity or insanity, but I have seen him violently excited. At times I thought he was right enough in his mind; at other times quite the reverse. He generally carried a pistol with him, and sometimes a sword. He often spoke about a list of persons he had made out, whom he was to shoot or stab, and he often used threats against them. He put every one in his "list" who offended him in any way.

William Gray, apprentice to Alexander Mill, haircutter, Montrose, identified a thick stick he had sold to Campbell. James Anderson, tacksman at Leuchland toll-bar, deponed that Dr. Smith and Campbell passed the bar in a gig at ten minutes to eleven on the Saturday night; James Wilson, hostler, Commercial Inn, testified to Dr. Smith coming with a horse and gig about eleven o'clock to be put up for the night, and leaving it; and James Fleming, boots at the inn, deponed to Dr. Smith coming into the house at three in the morning with his boots and trousers very dirty, and appearing as if they had been wet.

Miss Carnegie, of Noranside, said—I have known Dr. Smith about seventeen years. I remember seeing him at Noranside on the Wednesday before the fire. He talked of Mrs. Smith having gone back to her husband, and complained that she had done so without consulting him, after she had asked him to be her adviser. I saw him again on the Sunday. He told me that he had burned the stackyard at Haughs of Kinnaird, having fired it, he said, with a lucifer-match. He said he expected to burn the farm-house, but that a change of wind had occurred. He said he had had pistols with him, and that he had hid them near the house. On the Tuesday afterwards I got a letter from Dr. Smith from Coupar-Angus. He said he had had a friend at the Haughs, but that friend deserted him. I afterwards found that that friend was Campbell.

Cross-examined—He spoke a good deal about pistols. He said he had three pairs, and that they would fire twelve shots. I have known Dr. Smith intimately seventeen years, and had great friendship for him. He was a gentleman of good character, and much esteemed in the neighbourhood for his good qualities, and his devotion and benevolence to his patients. About January, 1853, a very marked change came over him, and his illness got gradually worse. He became extremely irascible, and this for causes entirely inadequate. In fact, my apprehension was that he would be some day arrested for an act of violence. He lived with me for some time as a boarder.

By the Court—When Dr. Smith told me that he had fired the stack, his manner was wild, but not more so than I had previously seen it. My impression was, that he did not seem to think he had committed any crime. I believe that, on the Sunday morning, when he came to me, he was not a responsible agent.

Several witnesses were called to prove Dr. Smith's journey to Coupar, and to his apprehension there, and to identify Campbell's stick, which was found floating down the Esk. Isabella Baird deposed to a conversation with Campbell, in which the latter stated that, after leaving the horse and gig, Smith proposed to take a walk, and that the Doctor took out a naked sword, and made Campbell walk before him.

Robert Smart, corn merchant, deposed that on the Monday previous to the fire he had signed a certificate as to Dr. Smith's fitness for an appointment under the Emigration Scheme. In cross-examination, he said that, from the alteration in his manner as evinced after the fire, he would not have given such a certificate, as he then considered him insane. On re-examination, he said Dr. Smith was always of an excitable temper.

John Burness, surgeon in Montrose, had known Smith for four years. He had always been of an excitable temper, but he had never seen any symptom of insanity about him. He indulged somewhat in drink, and perhaps affected his health by it.

Alex. Smith, surgeon in Forfar jail, said that when first brought to prison, on the 2nd October, Dr. Smith was labouring under considerable excitement, caused apparently partly from indulgence in liquor, and partly from the position in which he found himself. That excitement subsided very much the following day, when he was much more composed and quiet. Saw him regularly fully twice a-week, and frequently spoke two hours with him at a time. He spoke of his previous history and temperament in a rational and connected manner. He stated that about eighteen months previously he fell into bad health, caused by family vexations, and was naturally extremely irritable. In all these conversations perceived no aberration of intellect whatever. Saw him again last week. My opinion is, and I have no doubt whatever, that he is a sane man. I think it exceedingly unlikely that if he was insane when first confined I would not have observed some symptom of it during his confinement.

Cross-examined by the Dean—When apprehended, the prisoner's bodily health was in a very unsatisfactory state. I have also some doubts of his brain being

in a healthy state; but it is difficult to give a definite opinion on what diseased action may be going on in the brain, so I can't pronounce with any degree of certainty whether his brain is affected or not. His complaints are enlargement of the liver, but curable, I should think; a bloody oozing from the gums, which indicates a general weakness of the system, and arises from an imperfect assimilation of the food; digestion also defective. Don't think there is any diseased action of the brain at all. Of his ailments indigestion would affect the mind very much, and render him irritable; but none of them, I think, are calculated to produce insanity. I ascribe his excitement to indulgence in intoxicating liquors; but if that was wrong as matter of fact, it might arise from indigestion acting sympathetically on the brain. Could find nothing else to account for excitement or extravagance.

Re-examined—Traces of congestion of the brain are very occult, and symptoms supposed to arise from it often are found in reality to proceed from different causes. Dr. Smith's complaint would be aggravated by drinking. Never saw any excitement excepting the first day.

By the Court—When put in prison he was not drunk, but had quite the appearance of a man after a severe debauch a day or two before. Once he alluded slightly to the charge preferred against him, and asked what they would do with him. There was no appearance during his residence in the jail of his wishing to feign insanity.

By the Dean of Faculty—Was afraid of *delirium tremens* at first, and ordered stimulants to be given when necessary. It, however, did not ensue, and he got some stimulants once or twice during his confinement.

Dr. William Malcolm, physician to the Perth Asylum, read the notes he had taken of several visits which he had made to Smith while in prison. He spoke quite rationally in all the conversations he had held with him, and never exhibited any appearance of aberration of intellect. The result of his first examination was, that so far from being insane, he was an acute and clear-headed man. On a subsequent occasion he was highly indignant on hearing that the plea of insanity was to be made for him, and said he would rather be shot than shut up for life in a mad-house, when he was, and had all his life been, perfectly sane. Dr. Malcolm, in his examination by the Lord-Advocate, said he had no reason to change the opinion he formed at first with respect to the prisoner's insanity. Had Dr. Smith been gradually exhibiting symptoms of insanity for eighteen months previous to his imprisonment, he thought it impossible he could have recovered, so as not to have exhibited some sign of it during his confinement. Mental distress, aggravated by strong drink, would naturally produce paroxysms in a man of irritable temper. In answer to the Dean, the witness further stated that he never found a case in which a patient exhibited an insane delusion on one subject more than another. He added, that he found cases in which men whom he knew to be insane were anxious to make themselves out as sane.

C. Dickson, Sheriff-Substitute at Forfar, said that Dr. Smith was brought before him for examination on the 2nd October, and the opinion he formed was that he was then in his sound and sober senses.

By the Court—There was certainly a slight nervous appearance, but it did not seem to him more than what might have been expected in one brought up on so serious a charge.

Alexander Warden, clerk to the Sheriff-Clerk of Forfar, also gave it as his opinion that Dr. Smith's declaration was freely and voluntarily emitted, and when in his sound and sober senses.

The declaration of Dr. Smith, which was simply that he declined to answer any question, and the declaration of Campbell, were then read. Campbell, in his declaration, stated that on Saturday night, the 30th September, Dr. Smith met him on the streets of Montrose, and, after treating him to a beef-

steak and some tea; they proceeded in a gig to Brechin, thence to the Haughs of Kinnaird. Dr. Smith used threatening language against Mr. Smith of the Haughs, and said he was going to set fire to his farm-yard, and that he would shoot Smith if he came out. Campbell went on, as he was afraid of his life, for Dr. Smith told him he had a pair of loaded pistols. Dr. Smith then proceeded towards one of the stacks, and in a minute afterwards he saw the stack in flames. Dr. Smith wished him to put a rag dipped in turpentine, which he said he had on his person, in one of the stacks, but he declined to do so. On seeing the flames, he made off, and did not see Dr. Smith after that.

This closed the case for the prosecution, and the court adjourned for a brief interval to enable the Judges to attend in the First Division at the presentation of the letters appointing the new Judge and Solicitor-General.

EVIDENCE FOR THE DEFENCE.

George Smart, merchant, Montrose—who was, on the re-assembling of the court, called and examined by Mr. Muir—said Dr. Smith had at one time enjoyed considerable practice in Montrose, and occupied several public situations with great credit. Remember Dr. Smith's accompanying a Colonel Frazer to London, with a view to the latter being put in a lunatic asylum. He died in London, and when I next saw him he seemed very much affected by the Colonel's death. From that time I have observed a great change in Dr. Smith. He was a man, generally speaking, of sober habits; but ever since he has been highly irritable. He was in bad health in 1853, when Dr. Christison attended him. He frequently told me his disease lay at the back of his head, that his mind was affected, and if he could cure his mind, his body would be cured in forty-eight hours. At that time I observed great excitement in his manner. He threatened to take the lives of several parties who he supposed had injured him; but these complaints, I believe, were entirely imaginary. He asked me to carry challenges to one or two, but I reasoned him out of it. He has also conducted himself in a reckless and extravagant manner. I have seen him throw down swords and guns on the table—threatening to run parties through the body, and cut them open. Immediately afterwards I have seen him spit mouthfuls of blood. The attacks seemed to come on suddenly, and I believed him to be perfectly sober. He used to come to my house at all hours, and when he got a bed I believe he could not sleep. He often complained of violent pains in his head and chest, which induced me one night to put him into a bath. He said next morning if I had not done so he was satisfied he would have been dead in fifteen minutes. On one occasion, when he was dining with me, he went to the garden and lay down, saying, in reply to my entreaties to get up, that he had often lain all night in his garden, and next morning found his hair frozen to the grass. This was in 1853. He went in the end of that year to the Haughs, where I saw him twice, weak and ill in bed. In Edinburgh I saw him in August, 1854, in a hotel, where he became most violent and excited in his manner about the way in which the fish were boiled. He has a wife and family. For some time Mrs. Smith has been residing with her father in Liverpool. There is not the slightest foundation for an insinuation that I was too familiar with Mrs. Smith; there is not a more virtuous woman in the country.

By the Court—Dr. Smith appeared generally suspicious, and I think the separation from Mrs. Smith was owing to some causes which he exaggerated to himself. Their five children were left behind when Mrs. Smith went away, but he always behaved very kindly to them. He imagined the public were set against him, and therefore he could not come near his own house. At that time and from all these circumstances I considered his reason quite overthrown, and thought he should be sent to an asylum—an opinion which was shared in by Dr. Booth and others in 1853. He was very much respected as a medical man, and great forbearance was shown to him. He proposed at one time to

take a partner in his profession—a proposal which, in the unsettled state of his mind, I cordially seconded.

William Jameson, merchant, and formerly Provost of Montrose—I know Dr. Smith, who was professional adviser to my family for eight or ten years. Both in his private practice and public situations he was very highly esteemed as well for his professional acquirements as his private character. Within the last two years I have observed a very considerable change in him—particularly in his conversation, manner, and dress. At first he was a gentlemanly man of refined feelings, great delicacy in his conversation, clean and neat in his dress. Within the last two years all these were changed: coarse in conversation and slovenly in his dress to a disgraceful degree; but I never saw him otherwise than sober. His extravagances in Montrose were frequent. He threatened to shoot Mr. Boyd, the banker, and wanted Dr. Booth to carry a challenge to him. He had an idea Mr. Boyd had interfered with the Inspector of Factories to have his appointment of surgeon of factories given to another.

Peter Matthews, guard on the Scottish Central Railway, stated, with reference to the collision on that line in April, 1854, that Dr. Smith was one of the passengers in the centre compartment of a carriage. After the accident he appeared almost insensible. Complained afterwards of the shock. Saw him afterwards sitting down at the bottom of the embankment, but he would not rejoin the train, though he afterwards did. He appeared greatly hurt by the concussion.

James Wilkie, the other guard, gave similar evidence.

James M'Gregor, of the National Hotel, said Dr. Smith lived in his house in the latter part of August last. Occasionally noticed his conduct was remarkable—sometimes very excited, sometimes very melancholy, and at others very merry. Heard the gentlemen in the public room often say that he should not be left alone. He carried a dirk-like knife about with him. This he frequently exhibited in the public room. He used to lay it down beside him when he was taking his food. He said he got it from his father, who desired him to take care of it. "It had done deeds before, and it might do so again." The exhibition of the knife was made matter of complaint, and witness took the knife under his own charge. After that, saw him with a large carving-knife in his outside pocket as he was going out at the door, but took it from him. He said he was constantly hunted by spies looking after him, who stopped when he stopped, and turned round after him. He added, he had warned them against such conduct, and he took the knife for protection when he went out. There was some person, he said, he wanted revenge on, but he did not mention the cause of it. He asked witness if he would go out and second him in a duel. He refused, but promised, in order to pacify him for the time, to procure another second. He mentioned some one had injured him in his family—that some one had attempted to seduce his wife. He was sometimes in a state of great excitement in the public room. Nobody came into the room but he invited them to partake of what he was having. He left at ten o'clock on Wednesday morning. He came with a person in the evening—left immediately, and came back about half-past one. He wanted him to go and get his plaid, and proposed they should go and sleep all night in it on the Calton Hill. Witness remonstrated, on which he refused to come in, and said he would stand at the door all night. He then shut the door, on which the prisoner rung the bell violently, said he was insulted, and would leave immediately. Assisted to pack his luggage; he gave him his knife, and as he was in a state of great excitement against him, he left him and a waiter in the room. He afterwards heard a great noise, and heard him declare he would have the heart out of him. He next heard him rub the knife against the steps on the stair, so his apprehensions being serious he locked himself in. He did not drink much while he was staying in the house. He could take his glass, but he never saw him the worse of liquor.

By the Lord-Advocate—I have no notion of how much he would take in a day; he could always walk and talk. He came back after the last affair and made an apology to me. He said he was in one of those fits to which he was liable. He was then perfectly quiet.

Thomas McLean, waiter in the National Hotel, corroborated the last witness.

Dr. Christison—I was sent for in 1853 to visit Dr. Smith. I became first acquainted with him as a student and pupil in the University, afterwards in practice. I always regarded him as a very intelligent practitioner. I found him at Laurencesside, and visited him with Dr. Steel and Dr. Officer. The result of my observations was, that he laboured under a great enlargement and disease of the liver, great disturbance of the circulation, very rapid pulse, 120 to 130. He also laboured under considerable mental excitement. I ascribed it to the explanation given to me at the time, that there was a real cause—a great disturbance in his domestic circle. There was a probability of the cause being adjusted. He also complained at that time of an uneasy sensation in the back of the head, and heat generally in the head—want of sleep. His health was such that I formed a very clear opinion on two points, that he was very seriously ill, and also that there was great danger of his passing into a state of insanity. There were symptoms of an affection of the head forming, and there was a risk of his being constantly exposed to serious sources of excitement. The other medical men agreed with me in opinion. In January, 1854, I entertained hopes of recovery, but still the symptoms were serious. I again saw him last Sunday in the Calton Jail. I found him very poor in health. I found a large tumour in the upper part of the abdomen, evidently connected with the liver. His expression was so much that of one who had been recently intemperate, that I asked the governor if he had had spirits, and he said no. I then ascribed it to physical disease. I have not seen him at any time in a state of insanity. I would think it very probable he may occasionally be in a state of insanity, notwithstanding the calm and quiet state in which I found him in prison. A medical gentleman sent to see him, and merely sitting and talking with him, would not, except perhaps by accident, discover any trace of insanity. The form of insanity I would expect in his case is unreasonable suspicion, and strong feeling of resentment on account of imaginary injuries; but, of course, any form of insanity might arise—though the one I have mentioned is the usual form. A man under the influence of such delusions I would pronounce insane for the time.

By the Lord-Advocate—When I saw Dr. Smith I did not see any evidence of insanity, but as to the question whether I believed him insane, that is a different question. Several of his statements I considered to be delusions, and his general mode of statement indicated insanity. This was on Sunday last; but on no former occasion did his conversations show him to be insane. From anything I saw he was then able to distinguish between right and wrong. My apprehensions as to his sanity arose from the symptoms of cerebral disease. I cannot pronounce with certainty, but I labour under a very strong belief that cerebral disease has existed for some time, inasmuch, that were he a patient of mine, I would treat him for cerebral congestion or some more permanent organic disease. I infer that from the great restlessness at night, height of pulse, heat in the head, an attack in Forfar Jail, where he seems to have lost recollection and fallen to the floor, from his having at various periods had imperfect paralysis in one of his limbs, these, combined with his general state and appearance of his eyes, are so strong indications of the state of the brain that I would treat him for congestion. Congestion, however, is undoubtedly not only consistent with sanity, but with the most perfect bodily health. It is the character of persons labouring under this insanity to show it very readily to persons beneath them in station, or with whom they are very familiar; but to keep it out of sight of those who are their equals or above them in station, or

not familiar with them. As to whether the surgeon of the jail or myself could form the best opinion, I think the surgeon of the jail would have a very good opportunity of forming a correct opinion. Imprisonment on a criminal charge is undoubtedly a subject of mental disturbance. Perhaps, however, confinement in a jail would have the same effect as removal to an asylum, in removing causes of excitement.

By the Court—It would not have surprised me, from what I know of the history of cases of the kind, to find such a patient labouring under strong delusions on Saturday night, and comparatively quiet on Monday or Tuesday. After such an outbreak it is not uncommon that there is a reaction and depression in the physical system.

Donald M'Kay, governor of Forfar prison, stated that from the 2nd October to the 11th inst., the period during which Dr. Smith had been confined, he had only on three or four occasions had a glass of punch, and was only induced to take it after some persuasion. He never asked for it except once, after eating something that disagreed with him. He exhibited no desire for it at all. He varied much, particularly during the first ten or twelve days. He was sometimes quiet and sometimes excited. He was then very bad. He was never very frightened for him; but sometimes he would rather have been out of the cell than beside him. He had seen him in such a state that he could imagine nothing too mad-like for him to do. He was at first impressed, from the appearance of the eye, that Dr. Smith was insane, and the impression was confirmed by subsequent events in his conduct.

Dr. Brown, medical superintendent of the Crichton Asylum, Dumfries, considered Dr. Smith, when he knew him at Montrose, to have been a most intelligent practitioner, and a respectable member of society. Their acquaintance was renewed in 1854, when he asked his opinion relative to an attack of paralysis, but his letters were not those of Dr. Smith of former years. In the first place, they were not those of a man of education—sometimes not intelligible, and contained great suspicions, conspiracies, imaginary injuries, and generally marks of great excitement. His impression was that he was bordering on some form of mental disease. Visited him in December last, and found him so changed in the expression of the eye and in the features generally, that he should not have been able to recognise him. From the extreme rapidity of pulse—alteration in the mode and precision of articulation—pain and uneasiness on the skull being slightly struck—and the generally diseased condition of the body—sleeplessness, &c., he inferred disease of the brain. He concluded there was a change in the structure of the brain, and, certainly, if he had been put under his charge, he would have treated him for that affection. The prisoner spoke of the criminal charge against him at one time as a practical joke—then as a righteous judgment. He also mentioned quite seriously that he had a positive power under the head or bed of Mrs. Smith of Kinnaird, to blow her up. This he (Dr. Brown) treated as a delusion. He vowed vengeance also against some people whom he styled enemies. He regarded all these as manifestations of the disease of the brain, which he before had inferred. Believed him at that time to be quite insane, quite incapable of distinguishing between right and wrong, and not responsible for his actions. But that applied only to certain times; because there were occasions when he was perfectly calm.

William Steel, surgeon in Forfar, corroborated the opinions of Dr. Christison and Dr. Brown as to the insanity of the prisoner, and the disease under which he was labouring.

Thomas Morrison, superintendent of the Notting Lunatic Asylum, and formerly of the Montrose Asylum, was examined to the same effect.

Dr. Alexander stated that he had become acquainted with Mrs. Smith, of Montrose, in 1854, who got lodgings in Edinburgh through his recommenda-

tion. Afterwards had occasion to visit her professionally. Found the prisoner came to Edinburgh, and met him, on the part of Mrs. Smith, at Laverock Bank, and on other occasions, on one of which prisoner came up to him, and said if he did not mind his own business he would knock his brains out. The threat was again repeated one day in George-street; and he had never given any cause of offence, excepting in preventing his meeting with Mrs. Smith. Never had any conflict with him. Never fought a duel.

This closed the case for Dr. Smith, who was then removed, and the diet continued against him till this morning at nine o'clock.

Catherine Burn—examined by Mr. Patton for the pannel Campbell—stated that she resides near the beach at Montrose. Has known Campbell for twenty years, and ever regarded him as a quiet inoffensive person, unlikely to do any injury to anybody. He attended to the boat of Dr. Smith. The latter came to her house on the 26th of September, and remained for three quarters of an hour, till the tide was high enough to float the boat. He asked for a sheet of paper, and wrote a few lines, giving him the boat, if he should not return to Montrose, on condition of its never being sold.

James Orkney, examined by Mr. Shand—Am a mariner in Montrose. Have known Campbell for many years. He left his house the worse for liquor to go home the night before the fire at Kinnaird Haughs. Never saw him except on that occasion affected by liquor. He is highly esteemed in Montrose.

Provost Mackie, of Montrose, also bore testimony to the good character Campbell had long borne in Montrose.

This concluded the case for the defence, and the Court adjourned at a quarter before six o'clock till next morning.

The Court met again on Wednesday, when the Lord-Advocate addressed the jury for the prosecution. After fully describing the nature of the case, he referred to the trial of James Gibson before the Lord Justice-Clerk, in which his lordship, following the doctrine laid down by the Judges of England in 1843, in answer to certain questions put by the House of Lords, directed the jury that a party, not otherwise insane, convicted of crime committed under the influence of an insane delusion, and for the purpose of redressing or revenging some supposed grievance or injury, or producing some public benefit, was nevertheless punishable according to the nature of the crime committed. In this case the Lord Justice-Clerk also laid down the law that it was not sufficient that the pannel should raise the defence of insanity; he must establish beyond doubt such insanity as to exempt him from punishment by evidence which brought complete conviction to the minds of the jury, who were to decide the question of insanity, and not the medical witnesses who might be called. The Lord-Advocate also quoted from Baron Hume to show that the disorder must amount to an absolute alienation of reason. His lordship then went over the whole case in detail, contending that the circumstances only gave evidence of unbridled passions, excitability of disposition, and irritability of temper, aggravated upon occasions by intemperance. His lordship concluded by saying that, in his opinion, the evidence did not come up to what the law required when a plea of insanity was tendered.

The Dean of Faculty addressed the jury for the prisoner Smith, commenting at some length on the evidence, and contending that better evidence on a plea of insanity existing at the time of the perpetration of the offence, had never been presented to a jury. No doubt, he said, insanity was but a miserable plea to urge. He could not ask them by their verdict to restore Dr. Smith to his former position in society. By the visitation of God he had been stricken with a malady which was the most grievous of all; but though they could not restore him to his former state, they had nevertheless a most important duty to perform. They could do justice in this case. They could affirm, and he

apprehended they were bound to do it, that when he committed the offence he was absolutely bereft of reason.

Mr. Patton having pressed the Lord-Advocate privately to withdraw the charge against the pannel Campbell, but without success, proceeded to address the jury, and especially to vindicate him from an incidental remark of the learned Dean, in which he described him as "a tipsy old man," whereas he was of a most respectable character, and of exceedingly sober habits. He then stated that he was prepared to go into the case if the Court and the jury thought it necessary.

The Lord Justice-Clerk said, Counsel must judge of that; but the jury, after a moment's consideration, stated by their foreman that they did not consider it necessary.

The Lord Justice-Clerk, in his charge, said, that while it was right for those who administered the law to attend to the principles of jurisprudence by which the question of punishment was to be regulated, or the liability to punishment determined, these were not considerations for the jury. Their duty was to say, upon the facts, whether the insanity of the prisoner was established; they had to apply the law as laid down by the Court on that part of the case. They must not be too much affected by the gradual declension of a person of talent and respectability into the state in which he was found at last, if they were not satisfied that that was the result of insanity. They must distinctly remember that it lay with the prisoner to prove fully and satisfactorily that he was not liable to punishment in respect that when he committed the crime he was bereft of reason. If that defence were not found tenable, the Crown was entitled to their verdict. Common sense justified the rule of law, which required the prisoner to prove this plea, and they were only acting properly and fairly in requiring that it should be clearly made out. He (the Lord Justice-Clerk) did not intend to enter into the law of the case so fully as he had done in that of Gibson in 1844, as referred to by the Lord-Advocate. To the charge he then gave, he adhered in all respects; and he was glad that that charge had been taken by the best English writers on medical jurisprudence as an exposition of the law on the subject. In the first place, they must understand that the law did not for one instant countenance the notion of moral insanity—that was to say, what was called irresistible impulse, by which a man was driven into crime, while it was not proved that his reason was destroyed. That perversion of moral feeling was not insanity. The view of such cases taken by the law was the doctrine of the Bible—that if a man gave way to temptations, which were strong only because he had long indulged in evil thoughts and angry passions, he was not tempted above what he was able to bear; and, unless there was an absolute aberration of reason, the law held that he could resist, and must resist, promptings to commit an act contrary to law. Then, again, there was no such thing admitted in law as partial insanity, call it monomania or anything else. As was well said by Lord Brougham, if the mind were unsound in one point it was unsound in every respect so long as that which caused the unsoundness existed in the mind. It was not necessary, however, that insanity should be continually and constantly manifested, for a man might be insane at particular times—at one time a fit object of punishment, and at another an unfit object of punishment. The ordinary instances of this were to be found in what were termed "lucid intervals." But the jury must understand that absolute alienation of reason must be proved, a principle well explained by Baron Hume, and not less important in the present case because that profound thinker and excellent lawyer connected it with delusions. He had to remind them that the jury in such a case as this were far better judges of what insanity was than either medical men or lawyers. While he had told them that the pannel must be bereft of reason to be exempted from punishment, they were not to suppose

that that implied a state of demoniacal fury. Another consideration was, whether the insanity was heard of for the first time after the commission of the crime, or whether weakness of intellect had been going on progressively, with physical disease, for a length of time, and resulted gradually in alienation of reason. With regard to the prisoner Campbell, if they should be satisfied that the act was committed by Dr. Smith, under the influence of insanity, he (the Lord Justice-Clerk) did not think they would be inclined to bring in Campbell guilty of the act without Dr. Smith. The evidence against Campbell was as bare as it could well be, and it would have been infinitely better had he been produced as a witness, as he might have told what Dr. Smith did on that night. His lordship then proceeded to review the evidence, and his comments upon the leading facts of the case were favourable to the special defence set up for Dr. Smith. His address lasted, on the whole, above four hours.

The jury retired at a quarter past five o'clock, and, after ten minutes' absence, returned the following verdict:—

"The jury unanimously find that the pannel, George Lillie Smith, committed the act of fire-raising mentioned in the libel, but that he was insane at the time of doing so; and find the pannel, Robert Campbell, not guilty."

The verdict having been recorded, Lord Cowan discharged the jury, and expressed his regret that they had been so long detained.

The prisoner Campbell was then dismissed from the bar, and Dr. Smith was ordered to be brought up next day for judgment.

The Court, which had been much crowded throughout the whole proceedings, adjourned at half-past five o'clock.

The Court met next morning at half-past ten o'clock, when Dr. Smith was brought up for sentence.

The Lord-Advocate, in moving for judgment, called the attention of the Court to the case of John Smith, convicted for murder at the Jedburgh Circuit Court, and to that of Isabella Boyd, convicted for the same crime before the Perth Circuit, in both of which cases the pannels having been found insane, the Court adjudged them to be confined for life, or until the further orders of the Court.

The Lord Justice-Clerk thought these cases exceptional, inasmuch as the sentences had been pronounced on Circuit, and not at the High Court, which had a form of its own. His Lordship then pronounced the sentence of the Court, which was as follows:—"In respect of the verdict of the jury, find that the pannel is not a proper object of punishment, and, therefore assail him *simpliciter*; but, in respect of the insanity found proven, decern and adjudge him to be carried back to the prison of Edinburgh, and from thence to be re-transmitted to the prison of Forfar, therein to be confined, subject to the future orders of this Court."

Before the prisoner was removed, the Lord Justice-Clerk expressed some doubts as to how far the prison Board had the power of interfering with him in regard to his place of detention, and his Lordship intimated his opinion that, to obtain the greatest chance of a cure for the pannel, he should be placed in the lunatic ward of Perth Penitentiary.

Dr. Smith was then removed from the bar. He betrayed no appearance of emotion on leaving the dock, and seemed quite indifferent to the prospect of prolonged imprisonment which awaited him.

Counsel for the Crown—The Lord-Advocate, and Donald Mackenzie, Esq., Advocate-Depute. Agent—Mr. J. C. Brodie, W.S.

Counsel for Dr. Smith—The Dean of Faculty, David Mure, Esq., and John Miller, Esq. Agents—Messrs Hope, Oliphant, and Mackay, W.S., and Mr. William Shiress, writer, Brechin.

Counsel for Robert Campbell—George Patton, Esq., and A. B. Shand, Esq. Agents—Mr. David Crawford, S.S.C., and Messrs. Thomson and Savage, writers, Montrose.

ON THE TREATMENT OF PUERPERAL MANIA.*

BY J. M. WINN, M.D.,

Licentiate of the Royal College of Physicians, &c. &c.

THE prevalence of opinions, with regard to the moral management of patients suffering from puerperal mania, which I hold to be, not only erroneous, but dangerous, has induced me to choose the treatment of this disease as the subject of discussion to-night, in the hope that it may be the means of eliciting the views of the fellows of this Society on some points of the highest practical importance.

It would be impossible in the short compass of time allotted for the reading of this paper to enter fully upon all the points connected with the treatment of puerperal insanity, I shall therefore be compelled to pass briefly over that division of the subject which relates to the physical treatment of the disease, in order that I may dwell at more length on its *moral* management, a question of far greater importance, and on which the successful termination of a case more especially depends.

Insanity may attack a patient at three periods during the puerperal state—1st, during gestation; 2nd, subsequent to delivery; and 3rd, during lactation, in consequence of protracted suckling. The first form for the most part is a transient affection, and generally disappears on the termination of labour. The third variety of the disease generally manifests itself as melancholia, and depends on an anæmic condition of the system. The remarks which I am about to offer have especial reference to the second form of the malady, to that maniacal excitement which supervenes during the first months after delivery, and appears to be the result of extreme irritability of the brain, associated with great nervous exhaustion.

Before entering upon the immediate subject of my paper I think it necessary to object to the term of puerperal mania, used as it commonly is in a *specific* sense, and the use of which term has led, in my opinion, to serious errors in practice. When adopted as an expression of a mere variety of insanity, it is sufficiently distinctive and appropriate; but a serious mistake is involved in the supposition that the disease, commonly termed puerperal mania, is a *special* form of insanity, requiring a treatment entirely different from that which is laid down for the cure of mania in general. No doubt the peculiar condition of the blood, and the excitable state of the nervous system which obtain after delivery, tend to modify a maniacal attack, and to render it necessary that the treatment should be adapted to these qualifying circumstances. Nevertheless, the affection is essentially mania, and must be treated as such.

On reviewing the symptoms of puerperal insanity, it will be readily seen that the features of this disease are perfectly identical with those of an ordinary attack of mania, and for this purpose I refer to a sketch of the symptoms of puerperal mania which I published in my "Manual of Midwifery." This sketch is brief but true to nature, and quite sufficient to establish the truth of my assertion.

"It" (puerperal mania) "may come on suddenly, but its accession is often marked by premonitory symptoms. The earliest indications are restlessness, an anxious expression of countenance, peevishness, slight incoherence, and extreme talkativeness. Sometimes there is an opposite condition in which the patient is taciturn and listless. As the disease advances all the symptoms become aggravated, and the patient's mind is occupied with various delusions. She often expresses a hatred towards her husband and child, and frequently utters oaths and obscene language. A tendency to suicide is very common,

* Read at Med. Society of London, Dec. 2, 1854.

and the persistence of extreme restlessness is often one of the most inveterate symptoms. Sleeplessness will often continue for nights together, and resist the influence of the most powerful narcotics."

The importance of this generalization will be more clearly shown when I come to consider the expediency of removing puerperal lunatics to an institution especially set apart for the care and cure of the insane.

Before entering upon the treatment of puerperal mania, it is absolutely essential to determine, as far as the present state of mental pathology will permit, that particular condition of the system which gives rise to the distressing malady in question. Frequent and careful clinical observation has led me to infer that puerperal mania is the result of cerebral irritation combined with great nervous exhaustion, a deteriorated condition of the blood, and an imperfect nutrition of the nervous tissue. Granting these facts, it follows that an antiphlogistic mode of treatment is decidedly objectionable, and that the classes of remedies most likely to prove beneficial are sedatives, depuratives, tonics; some leeches may occasionally be employed to allay irritation of the brain, but on no account as a depleting measure. Venesection and blistering are positively injurious. A nourishing, though not a stimulating diet, is generally required; whilst opiates, gentle aperients, and diuretics, will all be found more or less useful. It is, however, on the moral treatment of a case that the recovery chiefly, if not wholly, depends. The psychological management of the patient is precisely the same as that which is generally indicated in *any* variety of mania. The first and most important part of the treatment is to provide an efficient nurse capable of maintaining a kind but firm control over the person committed to her charge. The patient must be incessantly watched. The fireplace should be guarded, the windows firmly fastened, and every other precaution adopted by which the danger of self injury may be obviated. The greatest tranquillity must also be observed, and the patient's friends and relatives rigorously removed from her presence. The great object is to break the morbid current of thought, by a seclusion more or less complete, and thus give rise to emotions and ideas entirely new. The advantage of thoroughly changing the association of ideas, is clearly proved by an interesting fact which Esquirol mentions: he observed that recoveries took place much sooner, and more frequently amongst those patients who came to Paris to be under his care, than amongst those who were inhabitants of that city.

The most important point, however, in connexion with the moral treatment, and one which deserves the most earnest consideration, is the question of the patient's removal to an asylum, when the ordinary remedies have failed to afford relief.

However inexpedient and culpable it would be to hurry a patient to an asylum at the outset of puerperal or any other form of mania, still a period may arrive, and that within very few weeks after an attack, when delay in having recourse to this measure, will subject the patient's health and life to the greatest danger. I regret to find that general opinion is either entirely opposed to the removal of a case of puerperal mania to an asylum, or at best, only sanctions this step as a last resource, when, as too often happens, the curable stage has irretrievably passed away. To combat a doctrine, fraught with such imminent peril, is the principal object of my present communication.

Dr. Forbes Winslow has clearly established the fact, in his treatise on the "Incubation of Insanity," that it is only during the earlier periods of an attack of mania that a cure can be expected from the use of appropriate remedies.

By a strange perversion of a general principle, this important truth has been very commonly lost sight of in the moral treatment of puerperal mania. In evidence of the frequency or this dangerous error, I have selected the opinions of some well-known modern writers, which will be amply sufficient to show

that I have by no means over-rated the amount of the evil in question. I have not quoted the names of the authors, fearing it might seem invidious to select the names of some few individuals, whilst there are so many of our profession who entertain views precisely similar.

One deservedly high authority says:—"Removal to an asylum is not so frequently requisite for the mental disorders of puerperal patients as for insanity occurring in other circumstances. It is principally required in the more obstinate and prolonged cases; and after other measures of partial or complete seclusion have been tried." Another author observes:—"I well know that patients labouring under puerperal insanity have sometimes been sent to lunatic asylums. Such a step, in such circumstances, is so inconsistent with every feeling prevailing in social life that whenever it is taken the whole responsibility and the whole odium of it must rest with the medical adviser."

Another writer makes the following highly reprehensible remark:—"These cases (puerperal mania) ought not to be sent to a *mad-house*, it being very rare for puerperal mania to continue long, especially when early and properly treated."

Before I proceed to contravene the opinions of these writers, so dogmatically asserted, I must protest most earnestly against the term *mad-house* employed by the author whom I have last mentioned. It is the duty of medical men to point out the advantage of such institutions as our asylums for the insane, rather than to excite the prejudice of unthinking minds against these valuable establishments. Appropriate enough as this term might be for those asylums of the darker ages when every description of cruel restraint was practised, it is singularly inapplicable now, when humanity and science are alike enlisted to allay the sufferings and ameliorate the condition of their inmates. It is to be hoped that before many years have elapsed, even the milder term of lunatic asylum will be abolished, and the far more appropriate title of "Hospital for the cure of the Insane," as recommended by Dr. Winslow, will be generally adopted.

About two years since, I was requested to see, in consultation with Mr. Meeres, a baker's wife, æt. 37, residing in Brick-lane, who had been attacked with mania five weeks after the delivery of her seventh child. I found her in a great state of excitement, talking incessantly, and her mind filled with phantasms. Her chief delusion consisted in the belief that she was suffering from poison which had been administered to her before my arrival. The tongue was white; the countenance animated and cheerful; and the body not in the least degree emaciated. Her watchfulness was incessant. Perfect quietude, a full dose of morphia, with as much seclusion as her circumstances would permit, were prescribed. This course was followed during several days, but without avail; neither sleep nor tranquillity were to be obtained. As this patient lived in the confined apartment of a small house, and was unable to procure the attention absolutely necessary for her recovery, I advised her immediate removal to an asylum, which was done a week after the commencement of her attack. In three months she was restored to her family perfectly well. Since then she has been confined with another child without any recurrence of the mania. It is right to add that this patient was naturally of a very excitable temperament, although there was not the slightest hereditary tendency to mania in her family.

I have selected this instance of perfect recovery from my note-book as one that strikingly illustrates the advantage of sending suitable cases to an asylum. In not one instance have I seen any ill consequences follow the prompt transfer of these cases; so far from it, I have frequently had to deplore the evils arising from delay. One case, especially, that I attended in the neighbourhood of the Regent's-park, recurs most forcibly to my recollection as illustrative of the dangers of procrastination. This patient had been ill for many months,

whilst all the routine practice had been employed in vain. Change of air and scene had been tried in vain. I cannot help believing that the long and painful probation which her family had to endure might have been spared them had she been removed to a well-regulated institution at an early period of her disorder.

Some interesting statistical returns of Bethlem Hospital, referred to by Dr. Webster in a valuable paper which he read before this Society several years since, afford incontestable proof that the treatment of puerperal mania, as conducted in large asylums, is pre-eminently successful. Dr. Webster observes—"As to the curability of this form of mania, nine recoveries more were reported than in the other varieties of lunacy; eighty-one puerperal patients having been cured, or at the rate of 61·83 per cent., whereas the average recoveries during the last twenty years in all cases of insane females treated at this institution was 53·67 per hundred. Hence three in every five cases of puerperal insanity may be confidently expected to recover within a year.

My friend, Dr. Theodore Boissragon, the medical superintendent of the Cornwall County Lunatic Asylum, has obligingly favoured me with the following information, strongly corroborative of the opinion I have advanced. He says, in reference to his experience of puerperal mania at various asylums—"The majority of cases recover; in fact, I do not remember having discharged a single case that was not convalescent. I perfectly coincide with you as to the propriety of sending these cases to an asylum. It is of course perfectly clear that they are for the time decidedly insane, and need that description of treatment for which the structure and appliances of an asylum are peculiarly adapted. When at Warwick I had charge of a case which affords a good illustration of this assertion. A private patient was treated at her own home by a distinguished physician of that town; but his advice was completely frustrated by the injudicious interference of the patient's mother. The consequence was that over indulgence was resorted to at one time and mechanical restraint at another, so that the patient might have become incurably insane, had not her husband insisted on placing her under my care after the disease had persisted for thirteen weeks. The means employed were quietude, seclusion, and amusement. The result was very striking: at the end of thirteen weeks more she was discharged convalescent, and her ultimate recovery was perfect."

The preceding facts must convince every unprejudiced mind, that with regard to the treatment of puerperal mania, the removal to an asylum, so far from proving prejudicial, is attended, on the contrary, with the happiest results to the patient, and cannot be too strongly advocated.

There are some, however, who admit the efficacy of this plan of treatment, but disapprove of it on the ground that the mere recollection of having been confined in an asylum will produce an injurious effect on the mind of the patient in a subsequent labour. I have never noticed such a consequence, and in the case to which reference has already been made, as occurring in my private practice, the patient's subsequent labour was unattended with the slightest mental aberration.

Another common prejudice which has not unfrequently interfered with the timely removal of a patient to a lunatic asylum, is the dread entertained by the friends of the individual lest some sort of opprobrium be incurred by her having been the inmate of what is vulgarly called a mad-house. This prejudice, which arises either from ignorance or mistaken delicacy, is rapidly passing away. Did the knowledge of Robert Hall's and Cowper's insanity diminish, in the slightest degree, the affectionate admiration in which these highly-gifted individuals were held? Did it not rather tend to increase public sympathy and private regard? The supposition that puerperal mania is generally a very transient affection is another erroneous opinion, which has frequently interfered with the early removal of patients.

The yearly records of our lunatic asylums furnish many examples of the chronic and protracted form of this disease arising entirely from the early neglect of appropriate measures.

In conclusion, I wish it to be clearly understood, I do not recommend the hasty and indiscriminate removal of a patient. There are many cases that may be cured without this measure being adopted. At the present time I have a young lady under my care, whose aberration of mind arises from derangement of the uterine functions, but who is rapidly recovering under the influence of a treatment, which has chiefly for its object the removal of the physical disorder. This lady had been ill for a considerable period before she came under my care; she had tried change of air and scene, with a variety of remedies; but the somatic treatment having proved so strikingly successful, I have not deemed it necessary to place her under surveillance.

In the humbler walks of life, cases of insanity should be generally removed at an early period to an asylum. For rich patients this measure may not always be necessary; they can obtain a quiet residence, all the comforts, and many of the advantages of an asylum. Not so with the poor. Confined, perhaps, to a close room, in a narrow and noisy street, insufficiently nourished and badly nursed, the poor patient is cut off from all hope of a cure. For cases of this description an asylum offers the only chance of cure.

THE MATERIALISM OF INSANITY.

By J. HAWKES, ESQ.,

House Surgeon, Infirmary, Bolton-le-Moors.

"Nay, I'll ne'er believe a madman till I see his brain."

Twelfth Night, Act IV.

In the "British and Foreign Medico-Chirurgical Review" for January of the current year, appeared an admirable paper by Dr. Bucknill on the Pathology of Insanity. It is not without some hesitation that I can subscribe to the doctrines therein laid down, and it is not, moreover, without consideration and some diffidence that I can presume to question their full force and truth. The metaphysician, though never so good a theorist, the physician, however sound a practitioner, must both give place to one who, sitting by the well of knowledge, dispenses with grace and justice to his thirsting brethren. He who, by opportunity and industry, can draw the deepest, to him we may look for the best and clearest supply. The pathology of insanity is still in its infancy; nothing is at present positively known, concerning the subtle change which the vesicular neurine undergoes in its state of transition from health to disease. We cannot investigate the secret and mysterious laws which govern and control the organization, development, degeneration, and decay of the great nervous centres, until we have arrived at some general understanding and agreement as to the premises on which they are based, and the conditions by which they are framed.

The scalpel and microscope will alike fail; the meditations of metaphysicians will come to nought; the disease will remain *statu quo*, a phantom and a fear. To the pure doctrine of physiology, we must look for the first glimpse of truth, and by the close application of its principles shall we soonest find the path; while without its help in the study of cerebral disease we shall never attain our end. We must, then, at the outset, bear in mind those grand fundamental laws of development and decay, such as are busy in their operation throughout the entire system.

Cell growth, the first indication of vitality, is promoted and carried on by

the one universal fiat of creation. Disease, which mars and destroys the fairest work of God, has, in this self-same law, its element and rise. We speak of nutrition, and perverted nutrition, results proceeding from the same source, but variably adapted and carried out under altered conditions. And, without any positive or appreciable change in the circumstances under which the rule is administered, there may be a peculiarity in the system, from the existence of which the healthy working of the law will ultimately produce the inevitable consequence of disease.

Insanity, by which term we understand a disordered state of the functions of the brain, dependent upon alteration of structure, appreciable or otherwise, and through which the phenomena of the immaterial mind are exhibited in a distorted and abnormal condition irreconcilable to reason. The word stands for a symptom of itself, it proves nothing, and though commonly employed in reference to the mind, *per se*, as the *fons et origo mali*, yet the mind of a madman may be sane, the fault resting on the medium through which its existence is manifested. Supposing, for the sake of illustration, we liken the mind, with its many radiant points, to the sun whose bright beams penetrate every transparent medium. We shall see that through such as are clear and without blemish they pass in perfect purity, while through those that are dim or opaque, their passage is retarded, if not prevented; or if we offer a coloured medium, each pencil of light, as it passes, alters its character, borrowing one from the medium traversed, and as such to be received. Applying the metaphor to the consideration of insanity, we may conceive that the mind, perfect in all its parts, and itself of spotless purity, yet the medium through which alone we can judge of its condition having become obscured or impaired, the disease should be held essentially one of matter, tangible, appreciable, conceivable, in short, if we only knew how. If, then, we start with this theory, the materialism of disease, we shall have gained a step to its elucidation, if not to its cure.

The materialism of insanity, is a theory which assigns the fundamental seat of disease to the brain rather than to the mind, and to the brain-cells or corpuscular neurine in preference to the tubes or fibres which are the conductors, not the foci, of volition. The disease, then, we must expect to find, if found at all, situated in these cells, and consisting of some form of derangement occurring among their constituent particles. Irrespective of active inflammation, the traces of which can be discovered by diligent research, there is a subtle and unknown change taking place in these cases which is hid from mortal eye, and shall be so till the labours of science have placed in the hands of her children more perfect instruments by which to bring to light the mysteries of creation and decay. But how is this carried on, and when? We need only remember how cell growth is maintained in other organs to answer the first question; how readily this phenomenon is urged to its completion under the influence of a due supply of nourishing fluid, or how tenfold it is increased by any vascular excitement in the part undergoing change. Of this we see examples everywhere,—in the reflection of epithelial cells on the lining of secreting glands, especially in the organs of digestion. The same cause, increased vascular supply, obtains in the brain, with the like results, cell growth and decay, as elsewhere. Increased nutrition, as we well know, leads to increased activity, whereby the functions of the part are more ably performed, and cell growth hastened to its completion; but here the law steps in and fulfils its end, there must likewise be decay, the worn-out, used-up cell disintegrates. As in the blood, so in the brain, the analogy is perfect. But have we any cause to suppose that the phenomena of repair and reproduction are carried on only during sleep, and that the reverse occurs when the brain is more actively engaged; that, as our author says, “in sleep, the cell may be growing from the capillary walls, or filling itself, and emptying or decaying

during wakeful hours." We cannot come to any such conclusions without denying the universality of nature's fundamental law; for how can we say that the brain, apart from any other collection of cells, is not under obedience to this rule, or, why should not development and growth be carried out at the time when the supply of blood is increased, when the nerve-cells are more thoroughly replenished by their oxygen carriers, the capillaries? Why, in short, should decay be alone transacting at the chosen moment for growth to abound? But let us not forget that, in proportion to the supply of oxygen, only another name for nourishment, so must the march of decay be advancing. Thus do these twin phenomena, development and decay, go ever hand in hand.

But the demand might, perchance, exceed the supply, though the reverse, we may presume, usually obtains; however, in such case, the result is obvious, inevitable decay. A decay, the exact nature of which we cannot at present more than speculate upon, characterized, perhaps, by a deficiency in the phosphate of lime, in fact, a general want of earthy salts; it may be a redundancy of fat or animal matter, or, by some error in the vital function of the cell, through which it fails to eliminate from the matters presented to it, the sort of ingredients proper for the healthy discharge of its functions; or again, without failing in the adaptation of its elementary particles, there might be a simple waste of material; decay, in fact, outstrips repair, and derangement of the faculties ensues. In this case the demand must be stopped, and time given for bringing up supplies. Sleep is the grand panacea—"Want of sleep," says the author whose paper we are considering, "I believe to be the true origin of insanity, depending on moral causes." This is a most just observation. If, at the onset of the malady, sleep can be obtained, sweet refreshing sleep, half the cure is won.

Thus, on physiological grounds, we should proceed in the treatment of this disorder, and till we can better trace from cell to cell the inroad of disease, we cannot, with any propriety, wander from the path. By the simplest means, the greatest ends are often obtained, and it may well be supposed, that, by aiding Nature rather than preventing her, we shall ultimately win success.

MISCELLANEOUS NOTICES.

Bethlem Hospital.—We have read with much pleasure the last report of this hospital. It appears that on the 1st of January, 1854, there were (including those out on leave) 329 patients in the hospital, of whom 176 were males and 153 females. From this date until the 31st December 1854, there were 232 admitted, 218 discharged, and 21 died; leaving in the establishment on the 1st of January, 1855, the following 317, with 5 out on leave:—

	Males.	Females.	Total.
Curable	58	79	137
Incurable	38	36	74
Criminal	88	18	106
	<hr/>	<hr/>	<hr/>
	184	133	317

The number of admissions during the year was below the usual average. The average of those reported as cured is $50\frac{8}{10}$ on the admissions. The health of the patients during the past year has been remarkably good. Dr. Hood makes some sensible observations in reference to the employment of the criminal lunatics. He says the marked effect of constant recurring occupation on the bodily health is only equalled by the improvement in the mental condition of the patients. We regret that, owing to this report only having just reached

us, we are unable to quote more extensively from its pages. It is well and carefully drawn up, and embodies many points of deep interest. In our annual summary of the reports of British asylums, we shall again refer to this document.

The American Journal of Insanity continues its onward career of usefulness. The papers published in this periodical are always of great practical value. In an early number we propose doing ourselves the pleasure of analysing, at length, the last five or six numbers of this journal. We hope, in this article, to make amends for all our past omissions, *quoad* this able magazine. Want of space has alone prevented our doing so before.

On the Construction, Organization, &c., of Hospitals for the Insane. By Thomas S. Kirkbride, M.D., Physician to the Pennsylvania Hospital for the Insane, Philadelphia, 1854. This is an able, valuable, and deeply interesting work, from the pen of an eminent physician, who has a thorough practical knowledge of the subject-matter of the book. We have only space in this number to direct the attention of our readers to this essay. In our next publication we intend to review Dr. Kirkbride's work in detail, and to quote extensively from its pages.

Letters to His Excellency Governor Manning on the Lunatic Asylums. By Dr. H. Tregevant, M.D., Columbia, S. C., 1854. We postpone our critical remarks on this deeply interesting series of letters until our next number, when it will be reviewed in conjunction with Dr. Kirkbride's essay. The pamphlet has only just reached our hands.

Insanity in Italy. The observations of Dr. J. M. Galt (of America), and of Dr. Girolami, of Italy, relative to this subject will form the basis of an article that will appear in an early number. Dr. Girolami's books were unfortunately sent through the general post, and, in consequence of the extravagant postal charge demanded, we were reluctantly obliged to refuse the parcel. Many American periodicals, alas! meet with the same fate. It occasionally happens that four and five shillings are asked for magazines, the selling price being only one and two shillings! All books and periodicals should be sent through a London bookseller. Pamphlets and books are occasionally entrusted to private hands, and they consequently find their way into the post office. Hence their non-delivery, in consequence of their being charged *as letters*.

To Correspondents.

LETTERS and Books for the Editor may be transmitted either through the Publisher or direct to Dr. WINSLOW, 23, Cavendish-square, London.

THE JOURNAL
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

JULY 1, 1855.

ART. I.—THE BRAIN IN RELATION TO THE MIND.

IT is obvious that physiological psychology cannot be expected to attain that scientific definitiveness characteristic of the more physical departments of philosophical investigation. The relations between the mind and the brain can probably be never determined with scientific precision, the obstacles to such a result being very conceivable. Whilst our researches into purely physical conditions educe facts and circumstances that strike observers with a certain exactness and uniformity, the phenomena of mind—of *consciousness*—are very often but imperfectly apprehended; and even when these latter are sufficiently distinct and clear to admit of notation and record, their significance, in the estimation of inquirers, is by no means uniform. Thus, whilst science in general, including the inferior branches of physiology, has of late years progressed with giant strides, a physiology of brain and mind that commands universal acquiescence has not nearly been attained. In order to realize a system of analytical psychology that should stand in obvious relation with a doctrine of the cerebral functions, we ought to be able to note the varying phases of consciousness in their outward manifestations with some such readiness and facility as that with which we estimate physical conditions. Were this within our power, we might go far to the accomplishment of a truly scientific psychology, based upon our knowledge of the structure and offices of the brain. The inevitable want of an objective standard to measure the value of mental facts, causes them to be devoid of satisfactory comparability: hence, psychical phenomena admit of no perfect system of classification; and, with still less exactitude, can they be compared with physical facts and conditions. Yet scientific induction demands complete and obvious recognition of the comparable worth

of all the circumstances that constitute the premises. Again, most of the materials obtainable for establishing conclusions regarding mental phenomena, are made up of certain outward manifestations that do not always suggest a very clear or unmistakeable interpretation. We note the external facts of consciousness in the several grades of animal life, from the lowest creatures up to man; but, in determining their significance, we have to speculate and to reason mainly from the analogies gained by introspection of ourselves. Moreover, in tracing the sequence of phenomena that characterize cerebro-mental action, we have ever to pause upon attaining the last *change in molecular disposition* that causally precedes *inchoate consciousness*. Between the line that bounds the ultimate physical condition and that which borders the primary psychical state, there is an inestimable chasm. The connecting link, indeed, between matter and mind must always remain, as it is, inscrutable to scientific investigation.

And yet these abstract difficulties, inherent in the subject, have not prevented inquisitive minds in all ages from hazarding speculations concerning the relations of psychical phenomena to the physical organization. In later times, indeed, conclusions have been attained with regard to this matter, that carry with them almost every stamp of authenticity short of actual demonstration. In a very early stage of physiological inquiry, it was considered that the brain and nerves had some special connexion with the manifestations of conscious life; and, in modern times, this, as a general proposition, takes rank as scientific truth. The special functions of the spinal cord and of particular nerves were partly anticipated, long before doctrines upon the subject were sustained by demonstration. The idea that the separate ganglia of the sympathetic nervous system were independent sources of power, suggested itself to Dr. Johnson, of Birmingham, about the middle of the last century, prior to Bichat's advancement of a similar hypothesis. And, as is well known, the researches of Gall, early in the present century, brought prominently before physiologists a theory, in principle now generally admitted, to the effect that the encephalon is not a simple organ, but that particular portions subserve different mental functions—a principle the correctness of which is hardly to be doubted, whatever be the errors and exaggerations of phrenologists. But, however just may have been many of the anticipations that prevailed in the early part of the present century, or at epochs anterior to it, very few of the general notions upon the brain and nervous system could be maintained as scientific induction. It is almost altogether of late years that patient and persevering observation, and ingenious experiments, have been systematically applied to obtain results that partake very largely of philosophical accuracy, even when

they do not entirely fulfil its imperious requirements. The researches of Bell, Magendie, and Bellingeri, demonstrated the anatomical distinctness of the motor and sentient nerves. Marshall Hall showed by experiment and pathological facts, that the spinal cord is a source of nervous power, independent of the brain, and urged, by convincing reasons, that its influence in the production of muscular movement was exercised without any necessarily attendant consciousness. Numerous facts and observations, particularly the experiments of Axmann, of Berlin, have rendered it probable in the highest degree, that the sympathetic nervous system presides over motions involved in the processes of circulation, nutrition, and secretion. With respect to these inquiries concerning the functions of the nervous system, our knowledge has become considerable, and in many respects exact. Even in those cases wherein the results cannot be absolutely maintained as positive, very promising researches are continually going on, so that our expectations of the future of neurology are of the brightest. But when we come to the encephalon—to those masses of nervous substance surmounting the spinal cord, and enclosed within the cranium—our deficiencies and shortcomings become more apparent. Certain general propositions can be maintained; but, when we would advance to particulars, rational hypothesis must be made to supply the defects of theory, if we are disposed to systematize our opinions and views. We can show by numerous facts and solid argument that some of the structures forming the base of the encephalon constitute seats of sensation and sources of motion, but by rigorous processes of induction we can *prove* little more. When the higher phenomena of consciousness are considered, and when we would establish a connexion of these with the physiological action of parts within the head, the nature of our evidence exhibits a comparative weakness. Certain doctrines now current upon this subject are most probably true, but the testimony sustaining them is of a somewhat different character to that by which the functions of the spinal cord and particular nerves have been made out. Our evidence is less direct; it is circumstantial; and it carries conviction, rather by its cumulative force, than by any immediate demonstration. We appeal to the results of mutilation, to pathological facts, and to comparative anatomy; we note the phenomena of embryonic development, and observe the variation in cranial forms as indicative to some extent of cerebral magnitude and configuration; and, from these several sources of investigation, we arrive at conclusions concerning the physiology of the brain that, in many respects, are but little short of scientific certainty. But when we pass from the general operations of mind and come to such as are special, and attempt to arrange the phenomena in categories,—when we would

make out a distinct relation between particular mental faculties and portions of the cerebral structure,—when, in a few words, we attempt the establishment of some complete physiological psychology, it is then that we discover the insecurity of our footing; an insecurity, most likely, that will never be altogether obviated, on account of the inherent difficulties of the subject.

Up to a certain point, however, undoubted advances have been made in this direction. *Some* views of the correlation of psychology and physiology can be shown, having higher pretensions than mere hypothesis and verbal subtlety. In regarding the physiology of the brain and nervous system in its totality, we may probably analyse and sum up our actual knowledge, and the most generally received opinions, very briefly as follows:—The notion propounded during the last century, that the sympathetic ganglia constituted independent sources of nervous power, has led, by gradually ascending generalisation, to the conviction, now all but universal, that the grey tissue of all the nervous masses—the vesicular neurine—is identical in its general character with the structures long denominated ganglia, not only in the fact of its being of vesicular composition, but also in that of its being the primary seat of *functional change*, the influence of which is *conducted* from part to part by the white fibrous substance; the nerve-trunks thus constituting internuncial cords simply. All the sources of our knowledge contribute more or less to the corroboration of this view. Hence the term ganglion is at this time applied, not only to those smaller spheroidal masses always recognised as ganglia, but also to those larger accumulations of vesicular neurine within the cranium, and to those tracts of the same substance pervading the interior of the medulla spinalis. The sympathetic system itself is probably the most simple in its functions, as it, or its presumed analogue, is the most universally found in the various forms of animal organization; its office being apparently to participate, as before observed, in the maintenance of organic life. In this view, consciousness can have no necessary place in its exercise. The vesicular neurine which is continuous throughout the length of the spinal cord and constitutes the analogue of the ventral ganglia of the articulata, is virtually demonstrated to be for the conservation of the animal fabric, by its subservience to respiration, by governance of the orifices of egress and ingress, and by its contribution to the integrity of some other processes, the purposes of which are mainly conservative. Its function is called into exercise by excitation of the peripheral terminations of nerves that communicate with it, or by influences that operate more immediately. No development of consciousness attends the proper action of the ganglionic masses within the spinal column. The first indications of conscious life show them-

selves coincidently with the nerves and ganglia of the external senses—of smell, taste, hearing, sight, and touch; these senses are obviously associated with collections of vesicular neurine which are situated above the spinal cord, and which, in the higher classes of animals, are protected by the bones of the skull. The sensory ganglia are, by white nerve-fibres, in direct communication with vesicular neurine expanded on the surfaces forming the special regions of the particular kinds of sensibility. Upon these latter the fitting impressions are made, and upon the extension of their influence to the encephalic centres, consciousness of subjective change—sensation—becomes awakened. But at this very point—that at which the correlation of psychology and physiology begins—the demonstrability of prevalent doctrines becomes less complete. Uncertainty to some extent exists thus upon the very threshold. We have even no sure knowledge as to which are the ganglionic centres of touch—the most simple and universal of all sensibilities. Although concerning the ganglia of smell, sight, and hearing we have some reasonable assurance, there is not that fulness of evidence which obtains in many other departments of physiology. The encephalic centre of taste is altogether undetermined. Sensations, in the first instance, determine simple perceptions; and these, as ideas, constitute the elements of thought and fancy. These more complex and varied phases of consciousness are accomplished, it is now very generally believed, through the instrumentality of the vesicular neurine investing the cerebral hemispheres, and hence denominated the hemispherical ganglia. This opinion, though essentially hypothetical, rests upon many substantial grounds, as it accords with the best established facts, alike of general physiology, comparative anatomy, and pathology. Emotional sensibility, and the instinctive appetites, are supposed to have an encephalic locality somewhere among the ganglionic masses situated below the cerebrum proper. And it is commonly thought that harmony in the action of muscles when movement, the result of mental activity, ensues, is secured by the physiological agency of the cerebellum.

This recapitulation of current doctrines of physiology in relation to psychology, comprises views that future investigations may very considerably modify, or altogether set aside. However well supported many of them may appear to be by facts from all sources, they rest upon inadequate foundations, if we would deal with them as with indisputable propositions. By continued researches, they may be made most probably to look much more like truth than even they do at present. It seems to us, however, that with respect to the higher departments of psycho-physiology, complete scientific accuracy is, in the nature of things, not to be anticipated.

And yet the pages of this Journal for many years testify that we would not discourage investigation of this difficult subject, nor attempt to run down theories however incomplete, if rational in themselves and apparently accordant with our well-established knowledge. There is a legitimate and a practical good in reasonable hypothesis; it stimulates inquiry, it fixes the attention and aids the memory in storing up facts, and, more than all, it causes systematic reflection. Of course we speak of its just use, not of the abuse.

Metaphysical speculations regarding individual faculties of the mind and the genesis of mental capacity and power and physiological notions concerning separate cerebral regions for distinct modes of mental action, have often been advanced by ingenious persons, and then been pursued by zealous scholars with keen and earnest partisanship. And however much in advance of all inductive philosophy, apostles and disciples in the ardour of novelty may have gone, useful results to practical science have almost always followed in some degree. The phrenological speculations in particular, having had much plausible foundation, have certainly exerted a beneficial influence upon moral and physical education, and also upon the curative management of abnormal states of the brain and nervous system.

These somewhat desultory remarks have been called forth by the perusal of a work by the distinguished Neurologist, Mr. Swan.* And although we should have had great pleasure in receiving and acknowledging enlightenment from so respected a quarter, we are bound, in the honest performance of our critical duty, to express the great disappointment with which we have studied its contents. We expected—we had an undoubted right to expect, in a book professing to elucidate the Relations between the Mind and the Brain,—that the writer would at least have availed himself of all the discoveries, and of all the best supported opinions, and of all the most truth-resembling hypotheses, that have lately been propounded concerning the brain and the nervous system; and we expected that an attempt would have been made, to exhibit some correspondence between these and the most rational speculations regarding the mental operations. But we find nothing of the kind. We notice in Mr. Swan's volume no reference to any of the advances made in cerebral and nervous physiology since the era of Sir Charles Bell. Mr. Swan, indeed, is in these respects a veritable Rip Van Winkle. The entire foundation in physiology of his various speculations resolves itself into a recognition of a nervous tract for sensation, and one for the several kinds of motion; each communicating with the brain, which in this discussion Mr. Swan somewhat

* "The Brain in Relation to the Mind." By Joseph Swan. 8vo, pp. 113. London: Longmans. 1854.

quaintly denominates the "sensory," scrupulously avoiding the Latin term in common use, *sensorium*. The mental philosophy which our author adopts is very much of the sensational school: sense-impressions are transformed into ideas and thought, in the "sensory;" and this latter reacts upon the system and the outer world through the voluntary motor tract; habit and exercise of mind, in particular modes, very much increasing the correlative power and capacity. We have no recognition of the reflex function of the spinal cord; none of the physiological distinctness of the grey and white bundles of nerve-tissue; we have no notice bestowed upon the modern doctrine, that the hemispherical ganglia are especially concerned in the manifestation of intelligence; none of the view, that the ganglia situated below the cerebral convolutions constitute the organic seat of emotion and sensation, having their distinct and proper reactions upon the muscular system. And, throughout the work, we look in vain for mention of any but the most obvious and commonplace speculations into which psychologists are accustomed to enter. We have neither original nor adopted analysis of the mental faculties; no account of the progressive development of psychical capability, coincidently with advancing perfection of the brain and nervous system. We have withal a very diffuse and obscure style, so involved and complicated as occasionally to produce absolute unintelligibility. Moreover, we have no proper distinction drawn between fact and hypothesis, none between scientific induction and simple opinion. And throughout the volume, indeed, a singular inaccuracy, both of thought and expression, is constantly met with. This is somewhat severe criticism, but the citations we subjoin will be found amply to justify it.

Mr. Swan's Introduction opens as follows:—

"All sensations or feelings pass from one or other of the organs of sense by their respective nerves to the sensory. Some of them are for temporary purposes, and fleeting, so as to become almost as much effaced as if they had never been received.

"The large mass of white fibres tending from the convolutions to the striated body, and thence to the crus of the brain, and the pyramidal body from which all the voluntary nerves arise, constitute by far the largest portion of the entire brain. These fibres of the voluntary tract have a capability of activity, not amounting to motion like that of the muscles, but on being excited possess an energetic or tonic power; so that when a letter or a man's face is transferred to them from the eye, they can change their negative quality into a more positive one, so as to receive the image as a correct miniature, and then conduct it by continuous fibres to join those about to pass through the striated body and crus of the brain to the nerves and muscles of the tongue for speaking, or through the spinal cord and nerves to the muscles of the hand for writing, drawing, or other mechanical device.

"All impulses received from the organs of sense, which are to be accepted for constituting knowledge, are impressed by one or more fibres of the voluntary tract on the sensory conjointly with the mind, and by one or several repetitions are made permanent. All knowledge purely mental is accepted by, and becomes subjected to, the mental faculties, and may at any time be conveyed back from the mind through the voluntary tract and muscles employed in the tongue for speech, and in those of the hand for writing."

The above passages comprehend in germ the whole of our author's doctrines and speculations. The limited physiology, and the obsolete method of applying it, we need not point out; it is too patent. The faults of style, moreover, of which we have spoken, are abundantly exemplified throughout the quotation.

After the Introduction, comes a chapter "On the Gradual Mode of Development of the Faculties of the Mind;" in which, however, we fail to detect the enunciation of a single principle beyond that which is comprised in the fact, that the mental powers evolve themselves by degrees, and become strengthened by exercise. We discover neither novelty in the mode of exposition, nor anything new or striking in illustration; on the other hand, we observe what we deem to be both confusion of thought and inaccuracy of expression. "Every day," says Mr. Swan, "furnishes fresh information," and "this is compared with the preceding results of thinking, and the stock of knowledge becomes enlarged and *corrected*." This of course is true enough, though rather commonplace, and not very well stated; but how are we to deal with the following propositions immediately succeeding the passages just cited?—"A great portion of it (knowledge) may remain fixed in the brain, but the result or meaning is preserved in the mind." Now we can understand that certain material changes which accompany the ingress of knowledge to the mind, may leave their traces in the brain; but how *knowledge* can take up its abode in the cerebral structure, is something entirely past our comprehension. For, let it be observed, Mr. Swan refers to the brain as distinct from the mind, to which latter, indeed, he assigns another office in the same process:—"the result or meaning (of knowledge) is preserved in the mind." Passing by the erroneous employment of *result* and *meaning* in the same sense, let us ask what, as men of science or philosophers, we can predicate of the mind and its operations in contra-distinction to the brain and its functions?

"Memory," says Mr. Swan, "is an *active* condition of the mind and brain, which allows a review or return of the knowledge that has been previously received." But, notoriously, memory is just as often a passive as an active process; *reminiscence* occurs spontaneously and without any active effort, whilst *recollection* demands voluntary exertion.

Indeed, our author's own phraseology clearly suggests the passive character of memory in some of its manifestations; for instance, it "*allows* a return of the knowledge," &c. We do not refer to these points in a spirit of hypercriticism, but in justification of our statement, that Mr. Swan's style was obscure and inaccurate.

We have failed to grasp the meaning of the passage cited below; it undoubtedly approaches *transcendentalism*—a pursuit for which our author, we presume, would claim no special vocation or aptitude. The subjoined extract is from the second chapter, on "Letters and Words as Expressions of the Mind."

"No idea of a spiritual nature can be conveyed to the memory except it be bounded by an outline, and this can be only a nominal representative of it; anything spiritual to be seen must be either brighter or darker than light, that the light may be an outline to the spirit, or that a darker colour of the spirit may be an outline to the light. It is only by similar comparisons that the mind can form an idea of spiritual elements, and therefore it must receive light, bounded by lines, for words, or other symbols."

We have twice very carefully read the above passage; but we doubt if any degree of attention would enable us to paraphrase it, however anxious we might be to communicate to our readers the thought which underlies the phraseology.

The chapter on "Speech, Writing, and Calculation, as Expressions of the Mind," commences with this passage:—"The first instruction enters by the ears, and is spoken by the tongue and lips." Does this proposition correctly express the fact? We think rather that the mind receives its first instruction through the senses of sight and touch, and that the auditory sense is probably the latest that becomes fitted for *informing* the infant capacity. The primary results, moreover, are outwardly manifested in gesture and intonation, long before the tongue and lips subserve articulate speech. Again, our author says,—"*Words could not have entered the mind of any one without an effort of the will, through the voluntary tract.*" To say nothing of the awkwardness of expression involved in mention of the "*voluntary tract*" in such context, we must demur to the whole statement. It is common experience that both words and their significance frequently enter the mind, without any attention or recognisable voluntary effort. We accidentally hear—not actively listen to—the utterance of some collocation of words; the attention is engaged with thoughts alien to their subject; at the moment when spoken, the words have struck the sense simply as sounds; yet, in a few seconds, it may be minutes, the meaning suddenly breaks upon the intelligence,—and that, too, without any sort of effort of the will.

Another chapter is on "Various Arts as Expressions of the Mind," and it abounds with those faults and blemishes which we have stated to characterize the whole of the work now before us. We submit the following as an example,—“A good painting . . . shows the mind of the artist, by which it was completed through the hand. The eye and will might have directed the muscles to give form and colouring, but the mind of the artist must in the good picture have been co-operating with the will to have produced the mental meanings of the various characters introduced into it.” What conception can we rightly form of the will separately from the mind? Is not the will its highest expression in reference to action? A writer who shall speak of the mind co-operating with the will, is obviously out of his depth.

In the present chapter, we have exhibited to us a very extraordinary mode of settling a philosophical difficulty. Mr. Swan furnishes us with what he deems to be a scientific explanation of that remarkable instinct in bees, which leads them uniformly to construct their cells in the hexagonal fashion. The solution of this problem is as follows:—

“The bee and wasp have been considered as possessing correct mathematical ideas in making their cells hexagonal; but their compound eyes are divided by hexagonal marks; and as the motions of the muscles of animals are directed very much by the mode of admission of light, the shape of the cells may be in accordance with that of the surface of the eyes. In all imitations of objects the muscles take a form of action from an organ of sense—the pattern is received by the eye, and thence conveyed to the brain, and having produced in this a precise impression of its form, the action of the muscles is modelled so as to continue its representation. The images of external objects always falling on the brain of the bee or wasp through the hexagonal divisions of the surface of the eye in viewing near objects, produce such habitual motions of the muscles as constitute unconsciously the hexagonal form of cells; and thus one of the faculties of instinct is accounted for, and the cause of the mathematical exactness explained.”

Condillac and his school taught the *sensational* philosophy, arguing that the mind is purely passive, and formed in its faculties by agencies from without; but the above reasoning seems to furnish a corresponding application of *mechanical* philosophy, in the explanation of vital and mental phenomena. We are surprised that Mr. Swan should have propounded his theory so confidently as he appears to have done. Many living creatures construct instinctively; young infants will often do so, long before their actions are guided by knowledge and reason; but there are no facts to show that correspondence obtains between the configuration of their eyes and the particular forms which, by preference, they delineate. But we should regard it as a very unnecessary consumption of the reader's time and patience, to enter upon the serious confutation of so far-fetched an hypothesis.

In a chapter on "Different Conditions of the Brain for Co-operating with the Mind," we find that our author ranks with those who maintain that the natural differences of mental capacity are but little, if any. At this we are rather surprised, as the question is one not difficult to be determined by observation, and it is one thoroughly practical; and Mr. Swan, we should suppose, is much happier in dealing with simple matters of fact than with speculative topics. We suppose, however, that, whilst writing his book, he allowed himself to be carried, like so many others, wherever the course of his temporary hypotheses led him. We cite the following:—

"Every fresh impulse requires one or more fresh fibres of the voluntary tract for its perfect reception, and thus so large a brain is necessary for the almost unbounded extent of the powers of the intellect of man; therefore, however hard he may work, and however much knowledge he may acquire, there is always room left for further stocks of information. He can occupy as much of his brain, however, as he pleases, and according to the degree of his industry, or idleness, will be his intellectual progress, so that the extent of his attainments rests with himself."

And the author, in the subjoined passage, still more explicitly evinces his *levelling* tendencies:—

"With respect to the attainments of different persons, there is the utmost variety: ignorance is usually attributed to weakness of memory; it is, however, probable that if proper pains had been taken to impress information on the mind and brain in early youth, there would not have been those occasions for showing such weakness. It would not then be decided that the original powers are much greater in one than in another, as to the quantity of learning capable of being introduced and retained by every person of ordinary powers, if proper methods are used."

We are not sorry that we are approaching our limits, and that we must arrest our pen. We had marked several passages in other parts of the work for citation and comment, but our space is consumed. What we have already given, will justify the unfavourable judgment of Mr. Swan's performance, which we have felt it to be our duty to declare. We know not whether our criticism will meet the eye of Mr. Swan; or, if so, whether he will care for it. But this we know, that to have reviewed anything from so respectable an author otherwise than with commendation, has been to us the occasion of unmitigated regret. For almost a quarter of a century, we have held Mr. Swan in the greatest honour; his admirable plates of the nervous system, drawn, we believe, from his own dissections, have often refreshed our memory when knowledge has been fading, and when the actual subject has been unattainable. We think that our author in deciding to engage himself in discussions of psychology and cerebral physiology,

has simply made a mistake,—one, however, that many able men have made before him. Any one who, in the latter half of his life, undertakes studies and researches totally foreign to early pursuits and habits of thought, is all but sure to fail. Sir Isaac Newton won for himself imperishable laurels in the fields of mathematics and natural philosophy, but failed entirely when, in his later years, he took to Biblical exegesis and the interpretation of prophecy. Sir Humphrey Davy achieved renown as a philosophical-minded chemist; when, however, his ambition led him to aspire to a ball-room reputation, we have read that he did not attain to a respectable mediocrity. Mr. Swan has shown himself for long years to have been a most able and industrious worker upon the *anatomy* of the brain and nervous system; he has clearly failed in his attempts to elucidate and improve the *physiology*. As before observed, very few men can successfully enter upon new pursuits in advanced life; mental adaptiveness for particular studies must be established and secured in younger days to attain success; and Mr. Swan will probably acquit us of disrespect to him, if we adduce, in reference to himself, the sentence with which he concludes his fifth chapter. “It is most probable that unless a person is gradually educated from his youth, he will not attain to excellence either in learning or the arts; and there are great difficulties in changing his position and leaving off an accustomed business, which depended on manual dexterity.”

ART. II.—ON THE CONDITION OF LUNATICS AND IDIOTS IN IRELAND.

A VERY curious, valuable, and highly interesting Special Report upon the “Number and Condition of Lunatics and Idiots in Ireland,” as presented to Parliament in a General Report on the “Status of Disease” in Ireland, at the period of taking the last census for that country in March, 1851, is now before us.

Before proceeding to the more particular object of the Report, it will be instructive to take a glance at the state of Ireland, in reference to any provision for the accommodation of the insane at an early period in the history of that country. In 1701, a workhouse was erected and opened for the relief of the poor of the city of Dublin, under the control of the Corporation, which afterwards merged into a Foundling Hospital. Sir William Fownes, Bart., who had been, in 1708, Lord Mayor of Dublin—writing to Dean Swift in the year 1732—says, “When I was Lord Mayor, I saw some miserable lunatics exposed to the hazard of others as well as themselves. I had six strong cells made at the workhouse for the most outrageous, which were soon filled; and by degrees, in a short time, these few drew upon

us the solicitation of many, till by the time the old Corporation ceased (1728), we had in the house forty and upwards." And in addition he states, "there is no public place for their (lunatics) reception, nor private undertakers, as about London." In 1730, this building assumed the name of the Foundling Hospital and Workhouse of the City of Dublin, and is the first record of the erection of lunatic cells in Ireland. In 1711, by order of the Lord-Lieutenant, who at that time was the governor of Kilmainham Hospital (opened in 1684 for discharged invalid soldiers), and Sir Patrick Dun, physician of the same, cells were constructed adjoining the infirmary of that institution for the reception of such soldiers quartered in Ireland as might happen to be afflicted with mental derangement. These original cells, which were constructed in accordance with the cruel and unnecessary coercion then in use, for the custody, but not the treatment, of the insane, were thrown down in 1730, and others, more capacious and better suited to the wants of their unfortunate inmates, were erected. Two years afterwards, Sir William Fownes, in answer to a communication from Dean Swift, drew up a Proposal to the effect, "That an Hospital called Bedlam be built in the City of Dublin or Liberties, for the Reception of Lunatics from any part of the kingdom;" and in allusion thereto, wrote, "then I would have the cells at the Royal Hospital Infirmary—lately made for mad people, &c.—examined, how convenient, and how in all points they are adapted to the purpose, with the costs of those cells, which I take to be six or eight."

Next to the above, and the first of the existing institutions, both as to time and magnitude, is St. Patrick's Hospital, erected in accordance with the will of the celebrated Jonathan Swift, Dean of St. Patrick's,

"In which he bequeathed the sum of about 12,000*l.* to purchase lands, with the profits of which to erect and endow 'an hospital, large enough for the reception of as many idiots and lunatics as the annual income of the said lands, &c.,' shall be sufficient to maintain. It is evident from Swift's writings, that he conceived the idea of giving

. . . the little wealth he had,
To build a house for fools and mad,

so early as 1731, when he wrote the celebrated and characteristic verses on his own death. In the following year he communicated with Sir William Fownes upon the subject, who thereon addressed to him the proposal to which reference has been already made. In 1746, the year after his death, the executors of Swift's will were incorporated by charter into a body of governors, voluntary contributions to a large amount were collected, which, with parliamentary grants and the proceeds of the Dean's bequest, enabled the governors to erect the present hospital in the vicinity of Kilmainham, and to open it for the reception of fifty patients upon the 9th September, 1757."

Those buildings which were subsequently erected, up to the present time, are given in a very simple form in table No. 5, and page 60, of the Report, and accompanied with much interesting and useful information respecting the greatly increased accommodation for the Insane, both in public and private asylums.

We will next direct the attention of our readers to the very important points which are more prominently brought before our notice in this Report; and introductory thereto we cannot do better than quote the words of the Commissioners:—

“We now approach a subject on which we possess some means of comparison with previous times, as for a considerable period annual Reports have been presented to Parliament by the inspectors of lunatic asylums, and because it was one that was discussed at length in the Report upon the Census of 1841. Moreover, from the number of persons belonging to the class now under consideration, who are confined in properly regulated asylums and other public institutions, the information respecting lunacy and idiocy which has been afforded is much more exact than could possibly be obtained at any previous time.

“In order to arrive at the number of lunatics and idiots in Ireland at the time of taking the Census, a special return, ‘Form I.,’ Table I., requiring the names, *or initials of names*, the age, sex, marriage, rank, profession, and the occupation of each person when in health;—the state of education, peculiar character of insanity, duration and presumed cause of disease, as well as the native place, were procured for all the persons confined or under treatment in the different lunatic asylums in Ireland, as well as the lunatics and idiots in gaols and workhouses. It was also deemed advisable to make an effort to collect, as far as possible, similar information concerning those lunatics and idiots who were either at large or in the custody of their friends at the time of taking the Census. ‘Form D.’ was constructed for this purpose, and placed in the hands of the enumerators (chiefly constabulary and police), who were informed in the ‘Instructions’ that mendicants and vagrants of these classes should be described from the best local information they could acquire; and we added, ‘where lunatics or idiots are in the custody of their friends, the inquiry necessary to fill this form should be made with *the greatest delicacy.*’ These Returns were subsequently verified by the enumerators.

“Although this is the first time that a similar inquiry has been instituted in this country, we are happy to say that no difficulties were thrown in the way of the enumerators, and that returns were made upon these forms of 1073 lunatics and 3562 idiots. These have been classified by counties and cities as lunatics and idiots ‘at large’ in Table I., pages 50, 51. In some cases the numbers specified in that and other tables given in this Report differ somewhat from those afforded by the inspectors of lunatic asylums in Ireland in their Fifth Report, published in May, 1851. In the Census previous to the present, no attempt was made to enumerate the lunatics and idiots at large or in the custody of their friends, but in the Report already referred to a return is given of the unaccommodated idiotic and insane

for the different unions in Ireland, by which it would appear that 3674 idiots and 931 lunatics, besides 4380 epileptic imbeciles, making in all 8985 of this class were then at large or in the custody of their friends. That return was made through the Poor Law Commissioners, by the relieving officers of each electoral division, but the estimate entirely rests on the authority of these officers, who merely stated the numbers they believed existed in their districts without specifying the names, ages, sexes, places of abode, or other circumstance of such persons—all of great importance, if not indispensable, in arriving at the numbers and condition of any class of the community.”

In the Tables which accompany this Report, is comprised information of an extremely valuable description, both for present use and for future comparison, and of the general objects of which tables we will give a short explanation.

Table 1 contains the number and distribution of the insane and idiotic in Ireland, arranged according to the provinces—viz., Leinster, Munster, Ulster, and Connaught, and each subdivided into its respective counties.

Table 2 presents at one view—

1st. The Occupations of Lunatics;

2nd. The presumed Causes of Insanity, which are placed under these four general heads—viz., Moral Causes—Physical Causes—Hereditary Taint—Causes which are not specified.

Table 3 gives a classification of the Insane and Idiotic in reference to the particular form of the Disease, and are arranged under these heads:—Mania—Suicidal Mania—Monomania—Dementia—Dementia with Epilepsy—Dementia with Paralysis—Idiocy—Unspecified Diseases.

And in further illustration of the preceding Tables, the Commissioners have added a 4th Table, containing 1st, the Ages—2nd, Married—3rd, Unmarried—4th, Educated—5th, Uneducated.

It appears by the tabular statement that there were “confined in the Irish asylums, prisons, and workhouses,” 9980 Lunatics and Idiots, which are thus divided:—

Lunatics—Males . . .	2503	} Total 5074
„ Females . . .	2571	
Idiots—Males . . .	2666	} Total 4906
„ Females . . .	2240	

and in addition thereto, under the head of “At Large, or in the Custody of their Friends,”—are 1073 Lunatics, composed of 554 males and 519 females, thus making the whole number of insane, 6147.

To give our readers some idea of the very great pains taken in this Report, we will offer in some detail a description of a portion of Table

No. 2, in respect of the occupations of lunatics, as it comprises a very elaborate classification, under ten principal classes, and which are again very numerous subdivided.

The principal classes are thus described:—1st, Professional; 2nd, Professional with Mercantile Pursuits; 3rd, Literary and Educational; 4th, Shopkeepers and Traders; 5th, First-class Trades; 6th, Second-class Trades; 7th, Agricultural; 8th, Occupations producing Exposure; 9th, Special Female Occupations; 10th, Unclassified.

And also as regards the presumed causes of insanity, under its first specified division already mentioned—viz., “Moral or Mental Causes.” This is formed into the following fourteenth subdivision—viz., Grief—Reverse of Fortune—Love and Jealousy—Terror—Religious Excitement—Study—Anger—Ill-treatment—Anxiety—Pride and Ambition—Political Excitement—Music—Joy—Remorse.

And to enable our readers the better to appreciate the information contained in this very curious and valuable Table to which we have just been alluding—we will place in a short tabular form an analysis of the results obtained from the “Presumed Causes of Insanity.”

	Males.	Females.	Total.
1st. Moral or Mental Causes . . .	370	477	847
2nd. Physical Causes	560	394	955
3rd. Hereditary Taint	169	194	363
4th. Unspecified Causes	4070	3746	7816

Total of Insane . . . 9980

Adopting the same Tabular Form, we will also show at one view the number of insane belonging to each division as above given, and compared with the ten classes of occupations already spoken of.

OCCUPATIONS.	CAUSES.			
	MORAL.	PHYSICAL.	HERE-DITARY.	UNSPECI-FIED.
	Male & Fem.	Male & Fem.	Male & Fem.	Male & Fem.
1st Class, Professional	40	54	31	279
2nd Class, Ditto, with Mercantile Pursuits	9	4	...	9
3rd Class, Literary and Educational	40	11	5	44
4th Class, Shopkeepers and Traders	25	13	6	66
5th Class, First-class Trades.	32	37	14	78
6th Class, Second-class Trades	78	76	16	251
7th Class, Agricultural	155	162	68	1213
8th Class, Occupations producing Exposure	15	22	...	45
9th Class, Special Female Occupations	44	20	14	142
10th Class, Unclassified	409	555	209	5689

To draw attention still more strongly to the general results from these very valuable Tables, we cannot do so more effectually than by giving at length the words of the Report.

"In enumerating the occupations of the deaf and dumb, we only learn what amount of industrial education that afflicted class are susceptible of. In instituting a similar investigation for the blind, some information may be gleaned with respect to the influence of occupation in the production of disease, but in studying the circumstances which tend to the propagation of lunacy or idiocy, it becomes a matter of great importance to observe the influence which the various occupations and modes of life have in inducing these affections. We have therefore endeavoured to arrive at as much accuracy as was possible with respect to the previous modes of life among lunatics and non-congenital idiots. The results have been classified and arranged in Table II., pages 54 to 57, in which have also been grouped the various causes, both moral and physical, which, according to the returns received, were believed to have been the immediate or exciting cause of disease in this class. In that Table are included the entire number of lunatics and idiots enumerated on Table I., but of these, 2164 only have had the causes of mental alienation assigned, the remainder being either unspecified, or concerning whose previous condition no accurate information could be procured—many of them being wanderers and mendicants. In arranging a classification of such occupations as might, in some measure, have conduced to the propagation of mental disease, difficulties arise which do not occur in drawing up a classification of the general occupations of the community where several modes of life are grouped together, not as they affect the physical or moral condition of the individual, but as they minister to the general wants of the people.

"In the following Table, ten divisions have been made. The first consists of the professional class, of whom 404 were affected with insanity, a large amount, considering the proportion which this class bears to the great bulk of the people, and exceeding by a considerable number all the other specified classes, with the exception of the agricultural. This preponderance of mental disease among the professional and upper classes, shows how much more education and habits of thought tend to produce aberration of intellect than ordinary manual labour. In this class, disease was attributed to moral causes in 40 instances, and in 54 to physical. Among the former—grief, study, and reverse of fortune were the causes to which it was chiefly assigned; and in the latter intemperance prevailed to a great extent. In 31 instances the disease was attributed to hereditary taint, and in 279 cases no cause was assigned.

"Among the professions we find the following numbers affected with mental disease:—clergy, 36; officers, including those of the army, navy, and police, 34; lawyers and attorneys, 28; and medical men, 13. Of the 404 persons in this first class, 151 were females, of whom 148 belonged to what is termed the middle and upper ranks of society, specified in the Table as 'gentleman or lady.'

"In the second class are included those engaged with professional and mercantile pursuits; consisting of occupations which engage a certain amount of mental labour, together with the employment of capital, influenced by the ordinary fluctuations of trade and merchandise. This division numbers but 22, being the smallest of the entire.

"The third class we have termed the literary and educational, consisting of those engaged in mental occupations, either of acquiring or imparting knowledge. It includes students and teachers of different descriptions, and numbers 100—of whom 65 were males and 35 females. The predominating morbid influence among this class is believed to have been study, of which 16 cases are recorded among the moral or mental causes.

"The fourth class, denominated shopkeepers and traders, embraces all those persons engaged upon a minor scale in trade or merchandise, together with petty dealers of different descriptions. It numbers 110—of whom 86 were males and 24 females; of the specified occupations, 71 were shopkeepers, and 27 provision dealers and huxters. Where the causes have been assigned, reverse of fortune among the moral, and intemperance among the physical, predominated.

"In the fifth class are included first class trades; it numbers 161 persons, 158 males and 3 females. The most numerous occupations were clerks, 73; and cabinet-makers and carpenters, 61; grief among the mental, and intemperance in the physical causes prevailed.

"In the sixth class are enumerated second class trades, among whom the most numerous were weavers, 96; boot and shoe makers, 76; tailors, 48; and smiths, 29. Masons and bricklayers, painters, butchers, and flax-dressers also afforded many instances of insanity. The entire number in this division is 421 persons—391 males and 30 females, the latter consisting of confectioners, and persons employed in weaving and the manufacture of flax and wool. In 78 instances moral causes have been assigned; and of these, grief, reverse of fortune, love and jealousy, terror, and religious excitement predominated; and in 76 cases the insanity was attributed to physical causes, among which intemperance, fever, and injuries of the head were the most numerous.

"The seventh class consists of all those persons more or less engaged in employments contingent upon agriculture, general and out-door labour, and other pastoral and rural pursuits. It is, as might be expected from the occupations of the great mass of the inhabitants of this country, the largest division, numbering in it 1598 individuals—1496 males and 102 females; the females consisting of landholders, dairymaids, and farm servants, the latter being thus distinguished from the female household servants enumerated in the tenth class, and who number 635. Of those specified, 155 were attributed to mental causes, such as grief, reverse of fortune, terror, love and jealousy, anger or excess of passion, and religious excitement;—162 to physical influences—and of these, intemperance, congenital malformation, epilepsy, fever, the effects of climate, injuries of the head, and the deleterious effects of mercury, have been recorded as the most frequent; and 68 were assigned to hereditary predisposition.

"In the eighth class are included 82 persons, whose occupations necessarily induce considerable exposure, such as seafaring men, coach and car drivers, constabulary, &c. In this division, grief among the moral causes, and intemperance among the physical, are said to have produced mental disease in the greatest number of instances.

"The ninth class consists of special female occupations alone, and numbers 220; among whom 44 are said to have become deranged from moral causes, as grief, reverse of fortune, terror, love and jealousy, and ill-treatment. The physical causes assigned amount to only 20, of which intemperance, epilepsy, and fever were the chief.

"The tenth class includes such occupations as could not well be classed under any of the foregoing heads, such as billiard markers, lodging-house keepers, mendicants, &c., and also the unspecified. It numbers 6862 persons—2616 males and 4246 females—but of these 5675 were unspecified, chiefly idiots. Among the specified occupations or employments, that of servants amounted to 698—mendicants numbered 347, soldiers 93, and factory workers 41. Of this class 409 became lunatic or idiotic from mental causes, of which grief, reverse of fortune, love and jealousy, terror, religious excitement, anger, and ill-treatment were the most numerous. In 555 cases the assigned physical causes were chiefly congenital malformation of head, intemperance, epilepsy, fever, puerperal affections, the effects of climate, paralysis, disease of brain, and uterine derangements. In 209 cases the disease is said to have been hereditary.

"From an examination of the totals of Table II., we find that a return has been made chiefly upon medical authority, or by the governors of the various asylums, of 2164 cases in which the cause of disease has been investigated, and an opinion offered thereon. The total cases assigned to physical causes amount to 954, the sexes being as 100 males to 70·36 females;—those to moral causes number 847, in which class the reverse obtains as respects the sexes, for there we find the females predominating as 128·92 to 100 males. Those instances believed to result from hereditary predisposition are 363, the females being in the proportion of 114·79 to 100 males.

"In both sections the causes have been arranged in numerical order; thus among the moral or mental we find grief predominates, being about one-third of the whole, and the sexes being 195·7 females to 100 males; reverse of fortune, 170; the sexes being 100 males to 86·81 females; love and jealousy, 106, the sexes being 67 females to 39 males; terror, 101, or 62 females and 39 males; religious excitement, 55, or 25 males and 30 females; study, 37, or 35 males and only 2 females; anger or excessive passion, 32, the sexes being equal; ill-treatment, 28, or 22 females to 6 males; anxiety, 24, or 14 males to 10 females; pride and ambition, only 9, or 5 females to 4 males; political excitement, 6, or 5 males and 1 female; music, 2 males; joy, 1 male; and remorse, 1 female.

"Among the physical causes, we find 351 cases attributed to congenital disease, specified as malformation of head, and composed chiefly of idiots, the great majority of whom might with justice be classed with those set down under the head of hereditary taint; the sexes are

in the proportion of 100 males to 94 females. In 216 instances intemperance is said to have been the cause of insanity, the male sex predominating so largely as to present the proportion of 100 to 21·35 females. Epilepsy numbers 100, the sexes being 56 females to 44 males, but this disease is, in many instances, only a symptom, and both it, disease of the brain, and paralysis, might all be classed together, when they would amount to 148:—the numbers attributed to fever are 81, or 42 males and 39 females; to injuries of head 39, or 33 males and 6 females; puerperal mania 36; the effects of climate, including sun-strokes, 33, chiefly males; disease of the brain (not produced by accident, including paralysis, which is but a symptom of the cerebral affection), 48, or 29 males and 19 females; the effects of mercury, 19, or 16 males, and 3 females; uterine derangement, 11; venereal excess, 7; dyspepsia, 7; cases attributed to rape and seduction, 4; and to violent hysteria, 2.

“Cases attributed to hereditary taint or family predisposition have been placed in a separate column, owing to the difficulty of determining how far the inherited peculiarity partook of the moral nature, or of the physical character transmitted from one generation to another. They number 363, or 194 females and 169 males. In 7816 instances the causes were not specified in the returns.”

Upon the subject of the Classification of Insane and Idiotic according to the form of the Disease, the Report gives an analysis.

“In Table III. the form of disease, with the supposed cause, are grouped together, and the latter arranged according to the frequency of each description of excitement or physical disease. Collected from such a variety of sources, and the returns filled by persons varying much in intelligence and knowledge, these causes and descriptions of disease can be but approximations to the truth, still they are of value, not merely of themselves, but as a means of comparison for future investigations. The idiotic amount to 4906, the great majority of whom having been so born, no information could consequently be obtained with respect to the causes which induced disease. In 382 idiots who became so after birth, the causes are specified. Among the insane, mania was the form of disease manifested in about four-fifths of the whole; of these 669 instances were induced by moral, and 400 by physical causes, while 222 were attributed to hereditary taint. In 44 cases the mania was of a suicidal character, grief and reverse of fortune being the chief causes which conduced to this phase of disease. Out of 417 persons affected with dementia, in 73 cases the disease was attributed to moral, and in 69 to physical causes; while in 32 it was traced to hereditary predisposition—the remainder of each of these classes being unspecified. In 277 cases of dementia, 169 males and 108 females were also affected with epilepsy; and 15 other cases, 10 males and 5 females, of the same form of mental aberration, were likewise paralytic.”

Another point of very considerable importance has also attracted the attention of the Commissioners, and they have placed in Table No. IV.

—under the heads already enumerated, describing the diseases in general terms of the insane—the ages of them, whether married or not, and also whether educated or not, and thereupon observe—

“Table IV. exhibits the ages of all the persons specified in the previous Tables, together with their state of marriage and education. From this we learn that of the entire 9980 persons, 1721 were married—647 males and 1074 females. In some few instances the particulars as to the state of marriage and education could not be discovered.

“In 3705 instances 3143 insane, 562 idiotic, and 69 unspecified—the sexes being 1996 males and 1709 females—the persons so affected were educated according to their respective ranks in life; and from this division of the Table we learn that, exclusive of the idiotic, the proportions were 100 educated to 61 uneducated, which, compared with the proportion which the educated bear to the ignorant throughout the general mass of the community, confirms the opinion with respect to the more educated class being more liable to mental affections than the unenlightened.

“It is only by a close examination of this and the foregoing Tables that the result of this minute inquiry can be seen or appreciated. The terms used for expressing the different forms of disease in these Tables are those employed in the returns afforded by the several public institutions, and as such, whatever may be their value, we are compelled to adopt them. We feel, however, that it is sufficient in this Report to afford, in the most comprehensive arrangements, the information returned in answer to our inquiries—leaving it for special writers upon this class of disease to avail themselves of the facts stated in these statistical returns as they think fit. We would, however, suggest to those who have the care of the insane, a more careful inquiry into the cause and form of disease under which patients labour, by which means, upon the next inquiry of this nature being undertaken, so large a proportion of the unspecified shall not appear. It is to be hoped that many of those returned on ‘Form D.’ at their own homes, in the custody of their friends, or who were wandering through the country, shall, before an inquiry similar to the present is again undertaken, be provided for in establishments suited to their wants.”

In addition to this Return, the Commissioners have extracted the following information, contained in a Return made by Wm. B. Drury, Esq., Clerk of the Custodies in the matter of Idiots and Lunatics, in the Irish Court of Chancery.

“That 108 persons of weak or unsound mind—viz., 76 males, and 32 females, were under the control of the Irish Court of Chancery, in asylums, or under the care of friends or guardians, in March, 1851, and of whom 13 were resident in England.”

The Commissioners give, as a general conclusion from the evidence contained in the Report, their opinion as follows:—

“Compared with the total numbers of the insane, mania prevailed chiefly in the counties of Monaghan, Tipperary, Longford, King’s,

Donegal, and Londonderry; and the suicidal propensity seemed to be developed most in the counties of Carlow, Wicklow, Kildare, Kerry, Armagh, and the city of Limerick. Monomania was most prevalent in the cities of Limerick, Kilkenny, and Dublin, the town of Drogheda, and the counties of Kilkenny and Kildare; whereas, dementia prevailed most in the cities and counties of Waterford and Dublin, the city of Kilkenny, and the counties of Meath, Galway, Sligo, Roscommon and Limerick. In making these calculations, the various persons confined in the different asylums have been included according to their county or native place."

We conclude our analysis of this important Report with the general summary of the Commissioners.

"The total number of patients confined in all the lunatic asylums of Ireland in March, 1851, numbered 3436; or 1739 males and 1697 females, being 227 more than were returned in similar institutions in 1841. There were 173 lunatics, idiots, and epileptics in the different gaols and prisons, on the 6th June, 1841, and upon the 30th March, 1851, 286 of the same class were confined in similar establishments. 494 lunatics, and 1129 idiots were located in the different workhouses on the 30th of March, 1851; but no comparison can be made as regards the numbers of a similar class in 1841, as at the time of taking the Census of that period only two or three workhouses were in operation.

"From the foregoing enumeration, we learn that 5345 of the lunatic and idiotic class were under restraint in Ireland at the time of taking the Census, and of these 3436 were in establishments specially erected and intended for their treatment as well as their custody and support."

ART. III.—AUTOBIOGRAPHY OF THE INSANE.*

WE cannot conceive anything more deeply interesting to the practical physician, so touchingly affecting to the philanthropist, or instructive to the speculative metaphysician and medical psychologist, than the account given by those who have recovered from attacks of insanity, of the workings of the mind, and state of their feelings and sensations, during the existence of mental derangement. We have, in previous numbers of this journal, placed upon record facts bearing upon the subject; and we purpose again directing the attention of our readers to a deeply interesting narrative, illustrative of this section of psychological literature. It appears that the author of the narrative before us published, in the beginning of 1851, in a periodical entitled the "Instructor," a short series of papers in which he detailed the history of his first attack of insanity. The pamphlet

* "Scenes from the Life of a Sufferer: being the Narrative of a Residence in Morningside Asylum."

now records the history of a relapse, &c., which he suffered, and for the treatment of which he was confined in the Morningside Asylum, near Edinburgh.

He says, at the commencement of his narrative, that he purposes "giving a sketch of the interesting and unique community of that valuable institution, with some details of its history and usefulness; all of which—as being illustrative of nervous and mental disease, from the pen of a non-professional observer, actuated by no official predilections or professional prejudices, but who will, with an honest purpose, 'nothing extenuate, nor set down aught in malice,'—may, I trust, be considered both interesting and useful."

After detailing some facts connected with his past life, he exclaims—

"Let no one make light of this disease of the soul! The unreflecting, in the high springtide of health, when their 'bosom's lord sits lightly on his throne,' or those in the enjoyment of robust animal life, may have no sympathy with the victim of this terrible visitation; but how soon may the strong man of indomitable mental energy be laid prostrate in the dust by the derangement of a little nerve in the network of his brain, and have all his pride and power reduced to the imbecility of childhood! The poor nervous dyspeptic is, like the leper of old, shut out from the social endearments of life. To him—

'The sight of vernal bloom, or summer rose,
Or flocks, or herds, or human face divine,'

has no charms. He has lost his way in the world; and the very affections of love, and home, and childhood, where he was wont to garner all his hopes, are to him either utterly perverted, or steeped in the waters of bitterness. Like Hamlet, 'This brave o'erhanging firmament, this majestical roof fretted with golden fire,' why, it appears no other thing to him than a 'foul and pestilent congregation of vapours.' And so, proud man, 'in action how like an angel! in apprehension how like a god! the beauty of the world! the paragon of animals!' this rare quintessence of dust, when a screw gets loose in the complicated idiosyncrasy, becomes a poor craven thing, a moral coward, and the most helpless and pitiable of organized creatures. Such was my own case; and this moral cowardice was the most distressing feature of my malady. I thought I was the basest and most contemptible being in existence, the abhorred of God and man, and the sure object of eternal reprobation; and, in my misery, self-destruction became a fixed idea in my mind:—'Any way—any way, out of the world!' I met with nothing at home but the most devoted gentleness and attention. My wife was to me a ministering angel in all my sorrows, for which she now suffers by failing health; but I have often sadly reflected on the fate of those cast among the rude and unfeeling, who meet with no sympathy, but rather cruel reproaches, for giving way to imaginary woes. Imaginary! 'A man's spirit may sustain his infirmities, but a wounded spirit who can bear?' Depend

upon it, reader, that the nervous sufferer would bear mere physical pain, before which you might shrink, with the spirit of a martyr, and would go to the ends of the earth to shake off the *incubus* that weighs upon his brain, and poisons the very fount of life, with every healthy moral perception. He can no more shake off his chronic nightmare by any effort of his will than you can shake off a headache. And let me entreat every humane reader who may honour these sentences with a perusal, to treat the wailings, and even childish eccentricities, of such a sufferer with the utmost forbearance and gentleness, lest he may unwittingly precipitate the fate of a fellow-creature, the blameless victim of a diseased organism, and often trembling on the verge of suicide and madness. How often have I come home in distraction, weary of the burden of life, and resolved to throw myself from a back-window, a height of five storeys! It is painful to go over this dark retrospect; but, as I think a faithful narrative of my sufferings and delusions, with my subsequent merciful recovery, may serve a useful purpose, I shall venture, with fear and trembling, to proceed."

The author soon afterwards, in his mental agony, attempted suicide, by putting a quantity of pungent snuff called "Taddy" into boiling water, and then swallowing the compound; but this proved ineffectual, and only induced violent hiccuping.

"It is, fortunately," he observes, "for persons in my unhappy situation, difficult to procure the more deadly mineral or acid poisons, but my diseased thoughts now fixed upon laudanum as a last resource. I had read the affecting account of poor Cowper, in his efforts at self-destruction, having procured a half-ounce phial of laudanum, as a deadly dose, and I procured, by pennyworths at a time, in different shops, about three-quarters of an ounce, that the quantity, as I thought, might be effective. But, as night approached, and the terrors of death and the judgment stood in array before me, along with the cruel injury I was about to inflict on my poor family, better thoughts got the ascendancy, and the deadly draught was thrown over the window, with a resolution to banish such a fearful purpose for ever from my mind. But the demon of self-destruction was not to be exorcised so easily, and it haunted me with the morbid and fixed purpose of moral insanity. I had been so distracted, that for some days I had been unfit to attend to my duties at the chamberlain's office, and I felt as if hurried by an irresistible impulse and inevitable necessity to consummate my terrible purpose. Accordingly, with thief-like caution, and 'method in my madness,' I procured the like quantity of laudanum by the same means as before, and concealed it, till I should go to bed with my sleeping draught, and 'sleep the sleep that knows no waking.'

"This was on Friday, the 2nd of July, 1852. When I think on it, I cannot account for the moral torpor of my mind, but by the conviction that my brain was overwhelmed with insanity. Pity for my poor wife and children, I seemed to have none; and a sense of my

moral responsibility to God, as a free agent, must have been greatly obscured or lost. Greedily I swallowed the deadly draught, and lay down in a stupor of misery, never, as I believed, to open my eyes again on this, to me, world of woe. I think it might be four o'clock on the following morning that I awakened to a dim consciousness of existence, and of what I had done. The walls of my bedroom, as I sat up, seemed to be revolving with a vertical motion, and the furniture and pictures on the wall continued spinning round, till my eyes grew sore and my brain giddy with watching their rotatory evolutions. With the exception of a feeling of stupor and giddiness, I felt well and happy; and I lay the whole of that day and next night in a soporific and delicious dream, between sleeping and waking. On the Sunday I walked with my brother in the fields, was very talkative and merry, and went to church in the afternoon. I kept my own council, however, regarding the laudanum, and in the evening I drank tea with my sister in London-street, without exciting any feeling but surprise and apprehension at my apparent rapid recovery and high spirits. I left London-street alone in the evening, intending to visit the grave of a dear friend, Captain Charles Gray, a true-hearted Scottish poet, in the beautiful cemetery of the Dean; but fortunately I had changed my mind, or had felt unable for the journey, as I found myself in the Meadows, when the sun was going down, and bathing meadow, tower, and tree with a flood of golden light. While enjoying the soft effulgence, I was suddenly struck with a faintness at the heart, and a violent palpitation commenced, as if the wheel at the cistern was hurrying on to a sudden crash. Believing I was instantly dying, from the violent throbbing of my heart and brain, it was with difficulty that I reached a seat, and entreated some persons who observed my distress to let my friends know that I was dying. Here, with a crowd gathering round me, I watched, as if for the last time, the sun descending behind some trees on the horizon, and, convinced I had but a few moments to live, the thought of what I had done overwhelmed me with terror and the certainty of eternal perdition. Recollecting that I had observed some discoloured spots on some parts of my body in the morning—no doubt a healthy effort of nature to throw off from the citadel of life the deleterious drug I had swallowed—the thought rushed on me that mortification had commenced, and further confirmed my dread of speedy dissolution. My friends at length came, and took me home, the palpitation having somewhat abated; but my dream-like recollections of the subsequent events of that night and the following day are but the reminiscences of insanity. Still, as in my former delirium, I was obscurely conscious of a double mental agency, knew every object and person around me; and, as there appeared to be a good deal of whispering and watching going on, I thought I was the victim of a conspiracy to deliver me up to the hands of justice as a flagrant criminal. How I passed the night I cannot tell, for I was unconscious of the sorrow and distraction of my wife; but all next day I talked and sung incessantly; and though I am no singer, and not remarkably gifted with the powers of elocution, my recitations and songs, from the ample stores of my memory, seemed so touching

and effective, that I shed tears of emotion and joy at my own exquisite utterances. The exalted egotism of the maniac was fairly in the ascendant; but though elevated in my spirits, I was somewhat conscious, from sad experience of the former fiery ordeal I had gone through, that this bewildering excitement was a premonitory symptom of approaching brain fever, and entire mental alienation. I believed I had ruined my character for ever with my employer; but as I was to put a bold face on my infamy, I had determined to resume my avocations next day, and laugh at the simplicity of the chamberlain who kept such a rascal in his employment. Meantime the whispering and plotting seemed still to be going on, and I had resolved to stand on the defensive, and keep a sharp look-out, when in the evening I was solicited by my brother and other two relatives to accompany them in a short excursion to the country, in a cab. To this I cheerfully acceded, marvelling much where we were going, or what friend we were to visit. I had scarcely taken my seat, however, when I suspected, from their manner, the covert purpose of the drive, and the truth dawned upon me that they were conveying me to a madhouse. But I felt passive and resigned to my fate, thinking I should find a refuge from disgrace, where the finger of scorn, or the reproaches of cruelty or malice would not disturb my solitude and repose; and I voluntarily gave up to my friends my penknife, believing, in my partial gleam of sanity, that I could not safely be trusted with edge instruments. In a few minutes, accordingly, I found myself an inmate of Morningside Asylum."

The author then proceeds to describe his conduct and feelings soon after his admission to the asylum. His advent naturally excited the curiosity of some of the other patients in the establishment, whom he says:—

"Welcomed me into their community with congratulations and laughter. Some eyed me with curious and critical inquisitiveness, and, like all other little isolated communities, were impatient to know who I was, where I came from, and what had brought me there. I told them I was Peter Mc'Graw, the tax-gatherer from Leith, so graphically described in poor Robert Gilfillan's song, and that I had been driven demented by ill-usage. But I was assured they were all happy there, there were no taxes to pay, and everybody laughed at the folly of the world without; an assurance which was corroborated by a hearty peal of laughter. After stripping and getting into bed, I continued, notwithstanding the remonstrances of the attendants, to be very noisy; I could not sleep, nor allow others to sleep, and I could not lie still, from nervous excitement; and I was forthwith hurried away to another part of the house, through a long line of corridors and echoing galleries, where I was put into a separate apartment, and locked up, with night, and solitude, and a distempered brain, in a madhouse. I was not yet, however, under the influence of terror, though somewhat confounded by my unceremonious reception; and having some exaggerated notion of my own importance, I believed I was confined through some political manœuvre connected with the pending election

of Mr. Macaulay, who had some time before sent me a copy of his "Lays of Ancient Rome," with a complimentary letter on my poetical efforts. Thus the spirit of a martyr for a little sustained me. I thought an acquaintance who had died in the Asylum ten years before was still living, immured in one of its cells, and a bonnet which was lying beside me seemed the identical bonnet that he wore; and I somehow comforted myself with the assurance that my friend, Mr. Combe, would visit me next day, and, penetrating the secrets of my prison-house, would not suffer a person of my importance to be robbed of his liberty. I tried in vain to sleep, but the hardness of my bed, suiting ill with the extreme attenuation of my body, would not suffer me to rest, while the nervous state I was in, and the dreadful noises that now assailed my ears, entirely put to flight nature's soft nurse, and threw me into a horror of great darkness and misery. Being rather sensitive in regard to personal cleanliness, before the daylight had faded, I was shocked to observe stains on the bed, a thing purely accidental and exceptional; while a utensil of gutta percha—(earthenware being obviously inadmissible in such a place)—distressed me with its strong ammoniac odour. In the apartment on my right, a poor maniac raved through a blasphemous form of prayer the whole night, cursing God, as he called it, with all the bitterness of his heart and tongue; while in that on my left another old madman reasoned high on the perplexities of fate and free-will, faith and works, with all the energy of a Calvinistic divine, and never seemed to sleep a wink. Another shouted and sung through the watches of that dreadful night, 'Cain was a murderer! Cain was a murderer!' which ran through my very soul with terror, as a denouncement and reproach levelled at myself; while the swearing and blasphemies which ever and anon startled the dull ear of night, blending with my distempered fancy, threw me into a delirium of insanity, and were enough to whirl the soundest brain. I now thought I was cast into hell, and herding with the damned, beyond all reach of hope or mercy, and my sensations under this delusion were indescribable. Anon 'a change came o'er the spirit of my dream,' and I thought I was in my grave, buried alive, deep, deep in the bowels of the earth. I gasped for breath, and marvelled that there should be life in the tomb, or any sense of its horrors. I pinched my body, and groped about the walls to be assured that I was a living man, and to get out of my perplexity. But these wild hallucinations overwhelmed my tottering reason; yet I never entirely lost consciousness and memory, and can look back on the whole drama like the phantasmagoria of a troubled dream.

"The cold grey dawn of the summer morning at last broke in upon my delirium, but its uncertain light at first gave greater scope to my disordered imagination, which converted the folds of the bedclothes into serpents and reptiles, and all sorts of loathsome creeping things, 'hydras, gorgons, and chimeras dire.' With this impression stamped on my brain, I started to my feet in horror, with my eyes riveted on the hideous sight; and there I stood transfixed, and unable to move for many minutes, in unutterable terror. At length, slowly reaching down my hand, as daylight increased, to touch one of the immovable

monsters, I was mightily relieved to find nothing but the folds of the bedclothes, and that I myself was the only living thing in the room. My two next-door neighbours still, at intervals, continued their exercises; and an occasional howl and rhapsody of oaths fell on my ear, and testified that I was still somewhere in the land of the living. But I had now lost all consciousness of where I was. I felt exceedingly unwell and feverish after so much agitation, and would fain have slept, but no slumber would visit my eyelids, and from the increasing commotion I heard, the business of the day seemed to be commencing. By and by my door was opened, and my clothes flung down upon the floor, but no one spoke to me, till a stout, good-natured looking man came in with some coffee and bread, and spoke kindly to me while I took breakfast. I then managed to dress, and walked out into a court, where I felt delighted with the freshness of the morning after the horrors of such a night. Here I saw a most *outré* group of human beings moving about—epileptic, idiot, and fatuous persons, with all the miscellaneous oddities and eccentricities of a madhouse. I did not suspect I was in Bedlam, but imagined I was in some hydropathic establishment in the neighbourhood of Glasgow. I began to feel my brain getting clearer, and reason partially resuming her seat, though I was perplexed to recognise in the persons about me friends and relatives, no doubt arising from some obscure association or resemblance, one of whom was a son of my own, who, poor fellow, was then far away on the deep, deep sea, but none of them could I get to understand or communicate with me, which distressed and puzzled me very much. I was now cheered by a visit from the medical gentlemen, who inquired kindly into my condition, and gave some orders regarding regimen and the bath. I kept in the airing-ground the greater part of the day, but towards evening my hallucinations returned, and, though I was conscious of sitting on a bank opposite a wall of the court, I could not shake off the impression that I was in my own bedroom, and that some one was listening at the keyhole; thus confirming the theory of the dual organization of the brain, which had lost its balance, one section being partially sane, while the other was utterly crazed. To my solitary apartment, and to bed, again I went, but not to sleep. The poor maniac on my right again commenced his revolting blasphemies, and he on my left his controversial monologue, while the same stunning noises and howlings, with ‘Cain was a murderer!’ again assailed my ears. I got through the night, however, without the aid of ‘tired nature’s sweet restorer,’ with less misery than the preceding, and was glad when I was called in the morning to enjoy the refreshment of the tepid bath. Then the sweet breath of the morning, while ‘the opening gowan wet wi’ dew’ spangled the fragrant grass in the courtyard, went to my heart with its freshness, cooling my fevered brain, and bringing tears of grateful joy to my eyes. But the thought that I was deserted by ‘all the world and my wife,’ and an object of scorn and abhorrence to my friends, was ever uppermost. One of my greatest privations was the want of snuff, and in the course of the day I was much gratified by the receipt of a parcel containing a supply of that necessary article, with other memorials of kindness, which I knew could only come

from the true friend of my home and heart. This was the best medicine to my bruised spirit, and helped to remove my suspicious dread of desertion and contempt. The mental fog was clearing away, and I entered into communication with some of my companions, who seemed very willing to take me under their protection. An arithmetician instructed me in figures, a 'stickit minister' in divinity, and a crazed flunkey, who assured me they were all mad but himself, maintained that Dr. Chalmers was the editor of a certain journal, and that he himself knew Robert Burns (who died long before he was born), and assisted him in the composition of some of his best poems. So 'time and the hour' move through the day, and another almost sleepless night, disturbed by the same demoniac noises as before."

On the morning after his admission, he became sensible as to his exact position, knew that he was

"In the Asylum at Morningside, and felt also satisfied that my friends had done wisely in removing me to the security of such a retreat. I felt that I had been snatched from destruction by the merciful interposition of Providence, and that I would yet be permitted, with renovated health, to resume my place and usefulness in society, and feel the endearments of my own fireside. These sane thoughts came over me with a healthful and exhilarating influence, and I lay down at night in my weary solitude with more comfort than I had felt for many a day, and got some snatches of sleep, notwithstanding the pandemonian noises around, which were now becoming familiar. Through the day I now found rational companionship and literary conversation with an educated man, who had been bred for the church, and who had carried off several prizes for his proficiency in mathematics. But he turned out too rude and self-important for me, his disease evidently being an inflated notion of his own consequence as a gentleman, which, with his boorish manners, would obviously render the unfortunate man unfit for society. But I found here a brother poet of no mean pretensions, and, as a prose writer, a man of unquestionable talent—the author of a volume of very considerable merit. He kept his room during the day, busy with his book or pen, and came out for an hour or two in the evening to walk round the airing-ground. He proved a good talker, and a very interesting companion, was full of anecdote and humour above the common pitch; and, having seen much of the world, and read a good deal, though somewhat loose in his opinions, we went over the world of books and authors together with mutual pleasure, and never, for the short time I enjoyed his society, flagged from a dearth of matter. These evening reunions were further enlivened by an old man, J——G——, the same who reasoned on divinity all night—who walked before us good-naturedly on our rounds, serenading us on his fiddle with all his might, and occasionally interpolating an observation of his own in his peculiar line of metaphysics. Honest J—— seemed to respect us as philosophers, and we gladly accepted of his homage. My friend was the crack contributor to the 'Morningside Mirror,' a miscellany printed and published in the Asylum, and written by the patients; and his contributions, both in prose and verse, would do no

discredit to works of far higher pretensions. Poor C——! his malady seemed to be exalted ideas of his own consequence, and of his great and even royal lineage, combined with unfortunate social propensities, which had crazed his brain, and driven him into a madhouse. He left the Asylum shortly after I knew him, and I should rejoice to learn that his mental health is confirmed, and that he had found useful and salutary occupation for his talents."

The acute symptoms of the author's attack having subsided, he was removed to what he terms the third gallery of the Western Asylum, appropriated to convalescents. He says—

"Here I found myself in a comfortable parlour, among about a score of quiet, rational-looking men, some of whom appeared attentive and polite, and welcomed me into their society with a frank, homely courtesy. After breakfast, and looking over some periodicals and newspapers, with which the patients are here supplied every Sunday morning, I attended for the first time the forenoon service in the chapel, under the pastoral ministration of Mr. Lorimer, the chaplain. Here I found about three hundred patients, with their respective attendants, assembled from all departments of the asylum, and was very much struck with the stillness and propriety of their demeanour, contrasting favourably with the levity and ostentatious parade often exhibited in some more fashionable places of worship. Here were the imbecile and fatuous by nature, with the hopeful convalescent; the confirmed maniac, with the peculiar grey light of insanity glittering in his troubled eye, and the inexplicable monomaniac, with his fixed delusion—rational and intelligent on every point but one; the moping idiot, the brain-struck epileptic and paralytic, the demented victim whose mental life and light had been obscured or extinguished by misfortune, and whom the world had cast forth as lumber; the unhappy victim of nervous hypochondria, with unhinged brain, who meets from the healthy and inconsiderate with more reproaches than pity: here were they all assembled, men and women, young and old, with all their delusions and woes, reverently inclined to join in the worship Him who had seen meet to afflict them with the heaviest of human calamities, and lifting up their voices in cheerful praise to the common Father and Everlasting One, whose mercy endureth for ever. The service was judiciously short and varied, and seemed to have a soothing and beneficial influence; for, amidst all the moral perversion and obscurity of thought among the insane, the one grand idea of God above, and the better land, seems never to be extinguished. Here I got out to a new airing-ground, and a new society, and a new sphere of observation. In the afternoon I had an opportunity of writing a cheerful letter to my wife, who, I learned, had called every visiting day, but whom I had not yet been permitted to see. At night I went to the same bed again in the dormitory, from which I had a week before been so unceremoniously expelled; but during those six nights so agitated and unwell had I been, that I did not sleep as many hours. When the drowsy goddess with leaden sceptre would press on my eyelids, a feeling of horror, a sensation as of impending death, came over me, which made me both to long for and dread the approach of sleep. But I had now

sufficient tranquillity to read ; and with the grey, growing light of the summer morning, I beguiled many an hour with a book, till the bell at six o'clock tolled the welcome advent of a new day, when, with my strange bed-fellows, I gladly rose, made my bed, and got a *cold* shower-bath, now substituted for the *tepid*, the electric shock of which dispelled all the vapours of hypochondria, and restored me to myself. I was terribly distressed with the extreme emaciation of my body, and sitting on the hard seats gave me much discomfort, as I was unable from weakness to keep long on my feet, or to walk much ; but I was encouraged to think that in the land of life and hope I would yet be enabled to conquer all my sorrows. Shut up within the walls of this little world, one day was exactly like another in its monotonous course ; but I now had a new world of books in the small library of the Asylum, and a most novel and most interesting world of life in the strange society around me."

Being now transferred to the care of Dr. Rowe, he was requested by that physician to contribute a poetical piece to the "Morningside Mirror;" and accordingly, invoking the aid of the Muses, he, under their inspiration, wrote one day, whilst reclining on a bank in the airing-ground, when "bathed in sorrow and tears," and surrounded by the "babbling and interruptions" of his poor companions in affliction, the following:

INVOCATION TO HOPE.

Star of the crushed and bleeding heart !
Thy mildest influence impart,
To soothe a pilgrim's woe ;
Wrecked on the leeward shores of life,
Unequal to the storm and strife,
That all must share below.

Piercing through sorrow's darkest dream,
O let him feel the glorious beam,
That lights the soul to God :
Like day-spring from on high descend,
That he may see the gracious end,
And kiss the chastening rod.

Like clouds of floating incense, roll
Immortal visions on his soul,
That he may feel the glow,
The fragrant amaranthine bloom,
That springs in realms beyond the tomb,
Untouched by human woe.

With introverted eye, no more
The secret springs let him explore
Of his corrupted heart,
But look to Him, the undefiled,
With all the faith that warms a child,
Unchilled by human art.

Love inconceivable and pure,
A righteousness that shall endure,
Will then his thoughts employ :
His sorrows, that no tongue can tell,
Who triumphed over death and hell,
That we might share his joy.

Lead him to fountains fresh and clear,
Where dreams of childhood may endure,
In sweet perennial bloom,
And soothe his sere heart's withering woe,
That wraps all lovely things below
In shadows of the tomb.

O ! in the realms of life and hope,
No more in darkness let him grope,
Like wretch without an aim ;
But strong of purpose and of will,
The true and faithful part fulfil,
That love and kindred claim.

Ah ! what were life, and what were death,
If reft of love, and hope, and faith ?
A gulf of dark despair !
But, fired by these, the enraptured soul,
Pierces through time's obscurest goal,
To scenes divinely fair.

Divinely fair ! creation young,
When God's own sons in triumph sung,
And hailed the dawn of time ;
What shouts of angels and of men,
Will hail Emanuel's glorious reign,
In Heaven's eternal clime.

Give him through mists obscure to trace,
The glories of creative grace,
Of dignity and love,
In nature's face serenely fair,
In all that thrills the vocal air,
Or warbles through the grove.

Thou rising and thou sinking sun,
Bright emblem of the Eternal One,

O light again his eye,
Like patriarch of old descried,
To meditate at eventide
In solitary joy.

Star of the beautiful and true,
Once more descend like evening dew,
Or morning's genial beam ;
With song of lark and breath of balm,
O find or make thy suppliant calm,
And soothe his maniac dream.

O seal his eyes in dreamless sleep,
That he no more may wake to weep,
Starting in horror wild ;
Or lap his soul in dreams of youth,
Warm with the glow of love and truth,
That charmed him when a child.

With food and raiment give content,
And all the good by mercy lent,
With grateful heart to prize :
A body sound, and healthful mind,
And hope that's not to earth confined,
But centered in the skies.

After referring to the great amelioration in the treatment of the insane introduced since the days of the celebrated Pinel, the author observes :

" My own youthful recollections of a madhouse were associated with all the horrors of a solitary cell, cruel coercion, the clanking of chains, and the howlings of despair, from having frequently, when a boy, witnessed such scenes in the Bedlam of my native place, one of the earliest public institutions of the kind in Scotland. Ah! could I then have dreamed that I myself should one day be the inmate of an asylum, the terrible conception would surely have whirled my brain, so miserable were the impressions of what I had seen on my youthful mind. But how well it is for us, that

'Heaven in its mercy hides the book of fate,
All but the page prescribed—our present state.'

'Else,' as Pope justly adds, 'who could suffer being here below?' Bedlam was then one of the regular sights of the place, and often a spectacle to gratify the idle and unfeeling curiosity of vulgar minds, which could feel any gratification in looking upon this last of human afflictions—the temporal wreck of an immortal mind. Often have I accompanied the keepers at supper-time, when doling out to the poor creatures their portion of potatoes and salt (but I rather fear the latter condiment was sometimes dispensed with), and I can never forget the wild, startled look of many a cadaverous visage which the grating lock and the unwonted light roused from its wretched lair. To some, chained among straw like wild beasts, their food was thrust through a loop-hole in the wall, their only window, while others were left to devour theirs in the dark as best they might. The more harmless or convalescent patients—if such a condition as convalescence was then recognised in such places—were assembled in the evenings and portions of the day in a common, ill-ventilated room, under the charge of a keeper, armed with a terrible thong (the same with which poor Abban Hassan, of the 'Arabian Nights,' suffered his flagellations), and a supply of straitjackets for the unruly. Frequent were the scourgings with this instrument of torture; and a supplementary infliction was readily found in a pump in the court, surrounded by a box, into which the refractory patients, male or female, were thrust, while a pitiless torrent of water was poured for a long time on their distracted brain. Sunday was a day of unmitigated solitude. No voice of prayer or

praise hallowed the day of rest; and the only sound that met the ear of the citizen enjoying a quiet walk in the fields on that blessed day was the shrill whistle of some solitary wretch, or

‘Moody madness laughing wild amid severest woe.’

“But I turn from this heart-saddening spectacle, with its many untold tales of unutterable woe, to the cheering atmosphere of life and light, which sheds a spirit of hope and comfort over the beautiful precincts of Morningside Asylum. At —, the fearful motto of Dante might appropriately have been written on the portal. Here words of hope and consolation might adorn the gateway, speaking better things to the unfortunate and their friends in the day of calamity, than our forefathers ever dreamed of in the dark days that are happily for ever past.”

The following description of one of the weekly balls at the asylum will interest our readers:—

“Strangers are always expected, and every one very properly wishes to appear to the best advantage, and to acquit themselves with propriety, in honour of the event. Accordingly, at seven o’clock, from all departments of the asylum the patients, accompanied by their respective attendants, came trooping on the tip-toe of expectation for the ball-room. On entering the spacious and brilliantly-lighted hall, I was never more struck and interested than by the spectacle that met my gaze. Here were from 300 to 400 persons of that class, who were formerly considered beyond the pale of social intercourse, like the lepers of old—pariahs of the human race—assembled for the exhilarating and healthful enjoyment of music and the dance, and forming as decorous and wise-like a festive party as could be found in all broad Scotland. When arranged for the dance—which is gone about with the utmost propriety and politeness, each gentleman courteously selecting his own partner—the *tout ensemble* of this extraordinary and unique spectacle must astonish and delight every stranger. First comes a Scotch reel. Perhaps from forty to fifty couples wait with glistening eye the starting note, when off they go, with ‘life and mettle in their heels,’ making the walls of the stately mansion vibrate to their vigorous tread, as if sorrow and despair had never followed their footsteps, or cast a shadow over their path. Grotesque and odd enough are some of their motions; and, as the ‘mirth and fun grow fast and furious,’ to watch their rapid evolutions, as I do with my mind’s eye at present, seems like the phantasmagoria of a wizard dream. It does not suggest the idea of Bedlam broke loose, but of Bedlam in ecstasy, till the fiddles give their closing scream of discord, when the whirling group is arrested, and with many a profound bow, and politely leading of partners to their seats, the assemblage is all in an instant quietly seated again, the ladies on one side of the hall, and the gentlemen opposite, while the strangers are set apart on the orchestra side. But now a song is announced by the master of the ceremonies; and anon a voice is heard from among the group of patients, chanting very sweetly Ballantyne’s pretty nursery song of ‘Castles in the Air,’ which is listened to in eloquent silence, and

rapturously applauded at the close. I may here be permitted to observe, that on another evening I was secretly gratified by hearing a song of my own, 'My Bosom Flower,' sung by Dr. Rowe, with his fine vocal powers, the author being unknown to all present, and congratulating himself in his obscurity. Quadrilles, country dances, and every variety of exercise for the 'light fantastic toe,' succeed, in which the delighted patients acquit themselves admirably; and so, alternating with the song and the dance, the evening passes away, winged with delight, till between nine and ten o'clock, when the Queen's Anthem, finely and heartily sung by the whole assemblage, closes the extraordinary and gratifying scene."

The author then details the history of his gradual restoration to mental health, of the advantages he derived from the shower-bath, active exercise in the open air, attention to diet, and the regulation of the stomach and bowels. Like many patients in a similar stage of convalescence, he expressed an anxiety to return to his own fireside, under the conviction that the storm had passed away, and the black clouds that had been hovering over him had all dispersed. He says—

"I now felt my health so much improved, that, urged by strong necessity and every motive of duty and affection, I began to look about for some employment; and through the influence of my friend Mr. Ballantyne, and with the sanction and recommendation of Dr. Skae, I got an appointment as a collector for the Edinburgh Water Company. This, however, after a week's trial, I found so much beyond the compass of my strength and faculties, that, with feelings of deep mortification and disappointment, I was forced to relinquish it. I became perplexed with the simplest calculations. I lost money, and I literally lost myself, having, on the last day of my collecting, become so bewildered in streets long familiar, that I could not discriminate north from south, or east from west, as if my brain were completely turned. I became very much alarmed, and went next day to the asylum, to consult Dr. Skae, who immediately made arrangements for my return; and accordingly, on the evening of the day following, I was replaced in my old quarters, and, fortunately, just in time to avert the dreaded relapse of a diseased brain. The cloud of hypochondria was hovering over me, and threatening to wrap my spirit again in its dusky folds; but, as it is only those who have felt the iron of such a malady enter their souls that can sympathize with or understand me, I will not inflict on the reader any further allusion to a nameless misery, that can only find adequate expression in the pathetic and terrible eloquence of the Book of Job."

After his return to the asylum the author was allowed to resume all his former privileges. For some time previous, he was in the daily habit of visiting the billiard-room of the old house, a recent addition to the comforts of the asylum, and a boon of great value to many of the patients. Here he regularly saw the newspapers, and the leading periodicals of the day, and, what was of great importance to his personal

comfort, he had the luxury of a sofa, or stuff-bottomed chairs, on which to rest his attenuated frame, a pleasure which was further enhanced by the society of a superior class of patients, of obliging gentlemanly manners. Like the poor lunatic of Crabbe, Sir Eustace Gray,

“They would, with free and easy air,
Appear attentive and polite;
Would veil their woes with manners fair,
And pity with respect excite.”

The writer then proceeds to describe some of his companions. He observes:—

“A very beautiful billiard-player was Mr. —, an old inmate of the house, and quite a psychological curiosity. He seemed like a man walking in a dream; and indeed the strange delusions of lunacy, and more especially in the case of my poor harmless friend, bear a remarkable affinity to the phenomena of dreams. The most absurd and improbable things do not strike the dreamer as being either absurd or improbable, but are stamped upon his brain and his senses with all the force of reality; and while one faculty is in an abnormal state of action, the presiding judgment, or the power of comparison and causation, is totally in abeyance. In our friend’s case, historical events and personages, from the dream-land of memory, were perpetually mirrored on his brain, but, like the images in a broken mirror, in disjointed fragments. I was greatly amused by the conversation of the polite old gentleman. The highest compliment he thought he could pay me, was to suppose me four thousand years old; for the events and persons of the present generation were as but of yesterday, and unworthy of notice. A portion of his extraordinary reminiscences may be worth recording, not in the spirit of levity or ridicule, but, as I said, in the light of a psychological curiosity:—

“Oh yes, Mr. —, I knew old Noah very well! There were two Noahs whom I knew; but old Mr. Noah lived some thousand years before the Noah you refer to, who built the ark. I had a good deal to do with the construction of the ark, and furnished some very useful hints in regard to the admission of light and air, and so forth. He was a very respectable man Noah, with a decent family, but unfortunately he got into very dissipated habits in his old age, and, in spite of all I could say to him, he indulged in brandy and water, to a very hurtful excess!

“Julius Cæsar was a very clever man, with a bald forehead; but I was more intimate with Alexander the Great of Macedonia, as I was long in the military profession myself. I one time commanded three millions of men about three quarters of an inch tall. No; they were not Lilliputians. I knew Captain Gulliver very well. And they were smart enough little fellows, but my men were excellent marksmen—they always aimed at the eyes, and never missed. I’ll tell you, Mr. —, the most extraordinary thing you ever heard, which beats railroads. I was once transported from the farthest shores of India to the centre of Africa in three minutes!’ ‘By what means?’ he re-

peated in reply to a question respecting his method of transit. 'By a bomb!' In reply to my remark, on the danger of being wafted so rapidly over vast oceans, he continued, 'Yes; it was attended with considerable danger. I once came down souse into the ocean; but fortunately I hailed a vessel, which came to my relief, and I pursued my journey to the wilds of Africa, with the loss of only ten minutes!' Sometimes, however, the poor gentleman would seem doubtful of his own veracity, or the strength of his memory, and remark, 'My memory is not so good as it was, and my health, for the last hundred years, has rather failed me, which makes my head a little confused.' And thus he moves about in his waking dream, wearing out his existence between his pipe and a game at billiards, diversified occasionally by a short excursion in the neighbourhood, in charge of an attendant."

The author, after recording some historical facts connected with the origin and progress of the Asylum, observes, when speaking of some of the causes of insanity,—

"It is melancholy to think, that, of all the causes of insanity, intemperance is found to be the most prolific; a terrible result that may well make the drunkard pause in his infatuated career. Of the cases admitted into the Asylum during 1852, no less than 50 were from this cause alone—34 males and 16 females; the males being usually as two to one of the females in these cases. This amounts to the startling number of 20 per cent. of the whole cases admitted; and, apart from the females, to 26 per cent. of the males.

"But there is an obscure, though very frequent cause of insanity, little known as such, and seldom adverted to, for obvious reasons, though well known to those familiar with the habits of the insane, which I simply allude to.

"A very general delusion I found to be a belief in some mysterious and unseen agency, such as electricity, mesmerism, or spirit intercourse (a prevailing delusion not confined to Bedlam), of which many think they are made the victims by the doctors, or some imps of darkness. One patient is firmly persuaded that he was hunted out of America by this devilish agency, followed by the doctors, who were concealed in the vessel, across the Atlantic, and finally landed in Morningside Asylum, where the same parties still operate on him with their electric experiments. Apart from this fixed delusion, he is perfectly sane, and a very obliging and useful person. Another man is similarly tormented; and believing he is acted upon through the medium of water, has a great horror of that fluid, actually turning pale when he sees any one wash their hands. In the parlour and bedroom of which I was an inmate, I had long observed a very quiet, sensible-looking man, and was curious to know what had brought him there, or how he was affected. For this purpose I sometimes talked with him, but could get no clue to his malady, or the trace of any insane symptom, his only peculiarity being, that he was constantly, when not at work in the grounds, reading his Bible. One day, however, on asking how he did, he solved the mystery, by telling me that he would be quite well, if they would let him alone with their electricity. Another, a most

useful and much-esteemed patient, thinks there is an electric machine in his head, caused by the swallowing of ground glass.

"Apart from the large class who are imbecile and idiots by nature, I think, from my own observation, that the bulk of those afflicted by mental disease, are originally of weak, and seldom above average intellect; and that very few could reply as did the celebrated Robert Hall, to the impertinent question of a foolish person, as to what had brought him to a madhouse, 'What will never bring you here—too much brain.' Of all the multitudinous causes of insanity, these fixed delusions are found the most difficult and hopeless to deal with. The brain has somehow got an unaccountable twist, and to attempt to reason with them on their preposterous fancies is quite absurd, as on that particular point they have unfortunately no reason to appeal to, and it only makes them angry; and no doubt the irritation they are subjected to by inconsiderate contradiction when at liberty, renders them unfit for social or domestic life.

"I was always very much struck with the sedative influence which an asylum has on new patients. Though brought there often manacled and stark mad, it seemed as if by instinct, and 'to the manner born,' they fell at once into the routine of the place, and were soothed or subdued by the scene and the atmosphere around them. One poor fellow was brought bound hand and foot, his distracted friends thinking their very lives in danger from his violence. He was instantly released from his bonds, and soon appeared parading the galleries among the other patients, dressed in the ordinary costume, and perfectly harmless, as 'one of us,' though still distinguished by a sullen pride, and a stern but passive resistance to all conciliation or inducements to any sort of work. This in general pleasant result must arise partly from the feeling of protection and security which an asylum affords, and partly from the sense of a power and authority which it would be useless to resist. The sleeping dormitories—containing, as I said, sometimes twenty beds, so clean, well-aired, and comfortable—have also a tranquillizing and excellent effect. In mental disease, 'it is not good for man to be alone.' Night, darkness, and solitude are the parents of phantasy and terror, and more especially with a disturbed brain; but in these dormitories a feeling of society, cheerfulness and light—a jet of gas, with fires in winter, being properly kept burning all night, and an attendant among the sleepers, diffuses great comfort, and dispels the sensations of terror. These good effects, it may be useful to observe, are most strikingly exemplified when the disease is taken in its earliest stage; the chances of cure, as proved by statistical evidence, being then as four to one in favour of the patient."

We cannot afford the space to quote more at length from this interesting *brochure*. It has its faults and exaggerations, but we pass them over, being only anxious to select those portions of the pamphlet that are likely to amuse and instruct our readers. As an episode in the life of a man who has suffered from an attack of insanity, and as giving an insight into the interior of one of the principal Scotch Asylums, we think the work will be useful to the public.

ART IV.—PSYCHOLOGY OF BERKELEY.*

SIX or seven years ago, a book was published to prove that there is no existence but *mind* or *spirit* in the universe, all the supposed materialism around us being only an illusive and unreal phantom. A prize of one hundred pounds was offered to any one who, in the judgment of some three or four individuals agreed on by the author and the respondent as competent to decide, should be pronounced to have satisfactorily refuted the arguments of the former. This challenge was never publicly heard of more, and therefore we conclude was never accepted. To the uninitiated in the history of metaphysics, the above fact may seem curious enough; but it may serve at all events to show that the Berkeleian cosmology and psychology (which are one) exhibit a phase of speculation which, however strange and staggering its results, has something to say for itself which is too plausible or perplexing to be answered off-hand—either to be refuted by Dr. Johnson stamping with his foot, or as Pope has it,—

“To be vanquished by coxcombs with a grin.”

We have little space for Berkeley's history; but the purity, benevolence, and disinterestedness of his character, in connexion with his extraordinary talents, gained him deserved admiration in his day. Pope ascribed “to Berkeley every virtue under heaven;” and Atterbury, an acute but not very charitably-tempered man, said, after his first interview with him: “so much understanding, so much knowledge, so much innocence, and such humility, I did not think had been the portion of any but angels, till I saw this gentleman.” Adverse factions and hostile wits, as Sir James Macintosh remarks, concurred “in loving, admiring, and contributing to advance him.” He was born in Kilkenny, in 1684. In 1709, appeared his “New Theory of Vision;” and the next year his “Principles of Human Knowledge,” in which he totally denies the existence of every kind of matter, whatever, independently of the phenomena of mind. In 1712, he defended still further his system of Immaterialism, in his “Three Dialogues between Hylas and Philonous.” He wrote a number of other works, but the above contain his metaphysical theories. His “Minute Philosopher” was addressed to the various characters which the free-thinking of the times had assumed; and his “Analyst,” and his “Defence of Free-thinking in Mathematics,” were designed to prove that mathematicians admitted mysteries into science greater than those of faith; and that the doctrine of fluxions comprised even

* “Works of George Berkeley, D.D., Bishop of Cloyne.”

falsehoods. The latter allegation gave rise to Robins's "Discourse," and Maclaurin's "Treatise on Fluxions," and was thus satisfactorily answered.

One of the most remarkable circumstances in the life of Berkeley was his offering to resign the deanery of Derry, worth 1100*l.* a year to him, in order to devote himself to the conversion of the North American savages, by means of a college to be erected in Bermuda. The scheme was abandoned in consequence of the government dishonourably failing to perform its promises of aid; and Berkeley returned to England, after spending on the other side of the Atlantic seven years of his life, and the greater part of his fortune, in vain. Some of his biographers say that he had previously rejected an English mitre. After his return, however, he was made Bishop of Cloyne. He afterwards declined the see of Clogher, which was worth twice as much; and though urged by some of his friends, in 1747, to entertain thoughts of the vacant primacy of Armagh, he wholly rejected the idea. On removing to Oxford, in 1752, to superintend the education of one of his sons, he wished to resign the bishopric of Cloyne; but the king declared he should "die a bishop in spite of himself." He died in 1753.

The idealism of Berkeley, unlike that of the Germans, stands forth in the philosophy of the country which gave it birth almost as an insulated phenomenon—not as a normal development of principles before admitted, or regarded as established in a reigning school of metaphysics. It is quite at variance with the general sense and tendency of British thinking, whatever Berkeley may say to the contrary. For he persuaded himself that because the vulgar think only and talk only of what they actually see, hear, feel, taste, and smell, and never trouble themselves about any unknown *substratum* in which the qualities of the objects that occasion their sensations are supposed to inhere—they therefore are the abettors of his views in rejecting all materialism. "Rejecting all materialism"—an ambiguous expression this, it may be said. It may be so, and no doubt is so; but Berkeley tells us in brief what he means by it when he says that the "sun, moon, and stars are only so many sensations in their [men's] minds, which have no other existence but barely being perceived."* Whatever be the case in the Continental schools, and especially in Germany, certain it is that no considerable number of men in our country have ever maintained a doctrine which can be regarded as akin to this. We have as yet had no school of idealists. The development of the continental idealism, on the contrary, has

* "Principles of Human Knowledge," 94.

been gradual and continuous, from its germ in Descartes, through Malebranche, Spinoza, the Leibnitz-Wolfian school, and Kant, down to the strange and pantheistic phases which it has successively assumed in Fichte, Schelling, and Hegel. *We* have had no such development; and we are too cautious a people to be led away so far from *terra firma* and "common sense," (so much decried in some quarters) as to allow either our imagination or our logic to carry us, to such an extent, into the inconsistencies and dangers of intangible and airy speculation. Happily we prefer doubt, or even ignorance, to floundering, like the later Germans, beyond our depth in a sea which has neither a bottom nor a shore. And what is more—we are not ashamed to confess our ignorance or our doubt. This is the reason why we have not had among us what can properly be called a *school* of idealists—a school, we mean, that has with Berkeley maintained that mind or spirit is the only substance in the universe. For even Reid and Stewart were decided dualists, whatever interpretation akin to Kantism or even to Fichteism some of their statements may be regarded as capable of bearing, when exposed to a refined criticism which they never anticipated. A proof of this is contained in the words of Sir W. Hamilton, in a foot-note to Reid's Section on a "Material World;" as follows:—

"Consciousness assures us that we are immediately cognisant not only of a *self*, but of a *not-self*; not only of *mind* but of *matter*; and matter cannot be known as existing except as something extended. To this I venture a step beyond Reid and Stewart; though I am convinced that their philosophy tended to this conclusion, which is in fact the common sense of mankind."

Nevertheless, though Berkeley founded no school among us, and represented no school; it must be admitted that he has not stood entirely alone, in his denial of an external universe in the sense in which its existence is ordinarily maintained. John Norris, a clergyman, published his "Essay towards the Theory of the Ideal World," in 1704; though it does not appear that Berkeley was acquainted with this book. Its purport was to carry out the principle of Malebranche, *nous voyons tout en Dieu*, to its legitimate results. Malebranche said he could not deny a material world, because it appeared to him that the Mosaic account of the creation demanded its admission; but he did not know what use to make of it when he had admitted it; for he asserted that we have nothing to do with it, all our perceptions and ideas being the immediate effect of a sort of contact with the Deity; so that the states of our own minds are really attached to the mind of God. Norris does not appear to have cared what became of matter,

his only concern being to establish that "all objects are seen or understood through the instrumentality of ideas; that these ideas do not derive their existence from the senses, but are part and parcel of the divine nature itself; so that an intelligible, that is ideal world exists really and only in God." Arthur Collier, Rector of Langford Magna, holds opinions in his "*Clavis Universalis*," published in 1713, completely identical with those of Berkeley, of whose speculations (which came out about the same time) he seems not to have been aware; though he had read Malebranche and Norris. Collier's mode of stating his argument is quite as clear and able as that of Berkeley; while as a writer he is not equal to the bishop in beauty of style and variety of illustration. It is worthy to be noted that, in some cases, he puts his argument almost in the same terms as Berkeley does.

"I declare that in affirming that there is no external world, I make no doubt or question of the existence of bodies, or whether the bodies which are seen exist or not—my inquiry is not concerning the existence, but altogether concerning the extra-existence of certain things or objects; or in other words, what I affirm or contend for, is not that bodies do not exist; but that such and such bodies, which are supposed to exist, do not exist *externally*; or, in universal terms, that there is no such thing as an external world."*

This is like Berkeley himself speaking, and he could not in the same brief space have more directly and guardedly stated the theory.

The inspiration which prompted Berkeley's zeal in contending for his idealism, was the conviction he entertained that the doctrine of materialism in all its forms, from the ancient atomic atheism to the dualistic doctrine of the co-ordinate existence of matter and spirit, was fraught with mischief to religion. He fancied that by banishing matter from the universe he should go far towards banishing atheism itself. For says he,—

"So great a difficulty hath it been thought to conceive matter produced out of nothing, that the most celebrated among the ancient philosophers, even of those who maintained the being of a God, have thought matter to be uncreated, and co-eternal with him. How great a friend material substance hath been to atheists in all ages, were needless to relate. All their monstrous systems have so visible and necessary a dependence on it, that when this corner-stone is once removed, the whole fabric cannot choose but fall to the ground; inso-much that it is no longer worth while to bestow a particular consideration on the absurdities of every wretched sect of atheists." He adds that, "men of better principles, observing the enemies of religion lay so great a stress on *unthinking matter*, should rejoice to see them driven from their only fortress, without which your Epicureans,

* "*Clavis Universalis*," pp. 3, 4.

Hobbiſts, and the like, have not even a ſhadow of a pretence, but become the moſt cheap and eaſy triumph in the world.”*

What would Berkeley have ſaid of the pantheiſtic idealism, of various phaſes, which was deſtined to be developed from the ideal ſide of the Kantian metaphyſic?—developments which we know Kant himſelf would indignantly have rejected: but how far were ſome of theſe developments from theoretic atheism, and in what reſpect would Berkeley have regarded them as preferable to that of the pantheiſtic materialism?

Our author was even yet more ſanguine in his anticipations of the good effects which were to ariſe from his ſpeculations, if he could only eſtabliſh them in the minds of men. He thought not only that matter as ordinarily believed to exiſt was the grand prop of atheism; he regarded it alſo as one great ſource of ſcepticiſm in reſpect to Chriſtianity.

“For example, about the *reſurrection*, how many ſcruples and objections have been raiſed! But do not the moſt plausible of them depend on the ſuppoſition that a body is denominated the *ſame*, with regard not to the form or that which is perceived by ſenſe, but the material ſubſtance which remains the ſame under various forms? Take away this, about the identity of which all the diſpute is, and mean by *body* what every plain ordinary perſon means, to wit, that which is immediately ſeen and felt, which is only a combination of ſenſible qualities or ideas; and then their unanswerable objections come to nothing.”†

Our philoſopher was eſpecially deſirous that his ſystem might be clearly diſtinguiſhed from that of Malebranche; and as a paſſage in which he points out the difference is at the ſame time explanatory of his own views, we will give it from the ſecond of his three dialogues between “Hylas and Philonous,” the work which contains the liveliſt if not the cleareſt expoſition of his views. We ſcarcely need premiſe that *Hylas* represents the ordinary cosmotheſtic materialism, as held by mankind in general; for ſo we venture to ſay, though our author maintains the contrary opinion: *Philonous* represents Berkeley himſelf and his ſystem.

“I ſhall not be ſurpriſed if ſome men imagine that I run into the enthuſiaſm of Malebranche, though in truth I am very remote from it. He builds on the moſt abſtract general ideas, which I entirely diſclaim. He aſſerts an abſolute external world, which I deny. He maintains that we are deceived by our ſenſes, and know not the real natures or the true forms and figures of extended beings; of all which I hold the direct contrary, ſo that upon the whole there are no

* “Principles of Human Knowledge,” 92, 93.

† “Principles,” 95.

principles more fundamentally opposed than his and mine. It must be owned that I entirely agree with what the Holy Scripture saith, that in God we live and move and have our being: but that we see things in his essence after the manner above set forth, I am far from believing. Take here my brief meaning: It is evident that the things I perceive are my own ideas, and that no idea can exist unless it be in a *mind*. Nor is it less plain that these ideas or things by me perceived, either themselves or their archetypes, exist independently of my mind, since I know myself not to be their author; it being out of my power to determine at pleasure what particular ideas I shall be affected with upon opening my eyes or ears. They must therefore exist in some other mind, whose will it is they should be exhibited to me. The things, I say, immediately perceived, are ideas or sensations, call them which you will. But how can any idea or sensation exist in, or be produced by, anything but a mind or spirit? This indeed is inconceivable; and to assert that which is inconceivable is to talk nonsense: is it not?"

Thus anxious was Berkeley that his system might not be confounded with Malebranche's, which evidently approached to some of the speculations of the latter Platonists; though there is a still closer resemblance between Malebranche's "Vision in God" and the idealism of some of the Hindus; who, according to Sir William Jones, believed that the whole creation was not so much a work, as an *energy*, by which the Infinite Mind exhibits to his creatures a "set of perceptions, like a wonderful picture, or piece of music, always varied, yet always uniform." In a letter from Paris, in 1713, addressed to the patriotic and philanthropic Thomas Prior, Berkeley says: "I intend, to-morrow, to visit Father Malebranche, and discourse with him on certain points:" this interview took place, though it is not recorded in Berkeley's biography.* In the "Biographia Britannica,"† however, we learn that the question turned, as might be supposed, on the existence of matter; which though Malebranche contended for, he made no use of in his system. Disputes are said to be vehement, often, in proportion as parties come near together on controverted points, but do not coincide. Father Malebranche, who was now upwards of eighty years of age, was suffering at the time from inflammation of the lungs; and Berkeley found him in his cell preparing something for himself, and cooking it in a small pipkin. Unfortunately the aged father waxed very warm in the dispute about the existence or non-existence of a material world; and he so violently exerted his voice that he greatly increased his disorder, which carried him off in a few days. Dugald Stewart appears much to have relished the story of this

* By his brother, Dr. Robert Berkeley, and Dr. Stock.

† Vol. ii. p. 251.

philosophical rencontre, tragical as was its issue, and regrets that Berkeley did not make it the subject of a dialogue, like those between "Hylas and Philonous." "Fine as was his imagination," adds Stewart, "it could scarcely have added to the picturesque effect of the real scene."

After all, however, some of Berkeley's statements are so much like a description of Malebranche's system, that (bating the inconsequence of the latter in admitting a materialism which it made no use of, and which Berkeley denied,) it might almost be asked by one impatient of metaphysics, what difference there was, as to the actual perceptions of mankind, between "*tweedle-dum, and tweedle-dee.*" At all events there was one point of nearer approximation than Berkeley would seem willing to admit. For while Malebranche held that matter has no power to affect mind, that the ideas of all things exist in the mind of the Creator, and that we see all in Him, and He is our "intelligible world;" Berkeley, in his Third Dialogue, makes Philonous say to Hylas:

"When I deny sensible things an existence *out* of the mind, I do not mean my mind in particular, but all minds. Now it is plain they have an existence exterior to *my* mind, because I find them by experience to be independent of it. There is therefore some other mind wherein they exist during the intervals between the times of my perceiving them, as likewise they did before my birth, and would do after my supposed annihilation. And as the same is to me with regard to all other finite created minds, it necessarily follows that there is an omnipresent, eternal mind, which knows and comprehends all things, and exhibits them to my view in such a manner and according to such rules as he hath himself ordained."

The latter part of the above quotation, which represents the Deity as exhibiting sensible things to our minds, (taken in connection with what precedes,) might almost have been penned by Malebranche himself.

Kant describes Berkeley's idealism nearly in the same terms which the latter applies to that of Malebranche. The German metaphysician says that the name which he has given to his own theory (Transcendental Idealism, as founded on *à priori* or strictly primary and axiomatical principles,) will not justify any one in confounding it either with the empirical idealism of Descartes, who tried to doubt of everything before proof, excepting his own existence which he found it impossible to question—or with the "mystical and fanatical Idealism of Berkeley, and other chimeras of men's brains." Indeed Kant constantly maintains that it never entered his mind to doubt of the existence of things in themselves (*ding an sich*) or *material* objects; he merely

denies that the sensuous representations of things (phenomena) *are* things in themselves. Kant charges Berkeley with an idealism which transforms real *things* into mere representations: on the other hand, the common notion of mankind with respect to the objects of our perceptions, which Kant says exalts mere *representations* into things—he chooses to call by the name of *visionary* (träumenden) idealism. Kant concludes by preferring the term *critical* to the term *transcendental* as a designation of his own idealism, which he regarded as the legitimate result of that self-review of the cognitive faculty which he proposed.* It is almost superfluous to add that Berkeley's scheme has nothing whatever in common with the subsequent development of idealism—Fichte's for instance; which was a subjective, egoistic, pantheistic hypothesis, in which the mind unconsciously created its own objects, (though it is remarkable that Berkeley states the notion of such an idealism in contrast with his own) or Schelling's spiritualized form of Spinozism—or Hegel's absolute idealism of thought, process, and relation.

Such is the licence and ambiguity of language, that we have almost as many meanings of the term *materialism* in the writings of philosophers, as of the contrasted term *idealism*. In its highest sense materialism involves the entire rejection of all spiritual existence, as in the school of the ancient atomic atheism, and in that which marked the close of the eighteenth century in France. But we find the term used with great limitations; as among ourselves, for instance, in reference to the opinions of Priestley and others, who have denied the existence of mind or soul as a separate principle in man from the body, while they admitted a creating Spirit. Hartley's system of vibrations, again, is frequently denominated by the term "materialism;" in consequence of his attempting to account, in his mechanical way, not only for our sensations and emotions, but also for our associations, our most abstract ideas, and in short all our mental processes, whatever, even to the avowed rejection of Locke's second source of knowledge, namely reflection; which Hartley says is "not a distinct source," since "all the most complex ideas arise from sensation." Yet Hartley was very solicitous to obviate the inference that he held any materialistic notions with regard to the nature or essence of mind.

* Denn dass ich selbst dieser meiner Theorie den Namen eines transscendentalen Idealism gegeben habe, kann Keinen berechtigen ihn mit dem empirischen Idealism des Cartes, oder mit dem mystischen und schwärmerischen des Berkeley zu verwechseln. *u. s. w.*—*Prolegom.* (Rosenkranz, S. 51).

Wenn es aber ein in der That verwerflicher Idealism (Berkeley's) ist, wirkliche Sachen (nicht Erscheinungen) in blosse Vorstellungen zu verwandeln, mit welchem Namen will man denjenigen benennen, der umgekehrt blosse Vorstellungen zu Sachen macht? Ich denke, man könne ihn den träumenden Idealism nennen, zu Unterschiede von dem vorigen der der schwärmende heissen mag. *u. s. w.*—*Ibid.*

The ordinary notion of matter has been that of something composed of separate resisting atoms, each having a distinct existence; there is, however, a view of it which may be termed the *dynamic*, in distinction from the atomic theory of it. To omit any ancient speculations, Leibnitz did not say that matter was a substance, but a *phénomène bien fondé*; sometimes he uses the participle or adjective *substantiatum* for it; but his meaning is more clear when he speaks of the "monads" of the lowest order (so called material atoms) as nothing but a kind of "*force*." Boscovich, in 1758, advocated a dynamical theory, maintaining that the ultimate elements of things are unextended, or are in other words *mathematical points*, endowed with certain powers of attraction and repulsion; and that it is from these powers that all the physical phenomena of the universe arise. Now Berkeley's view of material objects was wholly opposed to all the above senses of materialism, the last equally with any of those which precede. Berkeley said, indeed, as we shall see, that he did admit the existence of material objects; but then we must interpret this assertion so as to make it harmonize with his total denial that there are any independent existences in the universe excepting spirits.

Previously to some further inquiry into Berkeley's main system, it is worth while to advert to his "New Theory of Vision," the publication of which preceded that of his "Dialogues." This work brought out into clear light a grand discovery in mental philosophy, and it exhibits much originality in the author. It had been concluded by philosophers as well as by mankind, that the cognisance which we take of the distances, figures, magnitudes, situations, etc., of objects, was the direct and immediate result of the power of vision. Berkeley was the first to establish to all future time, by a clear line of demarcation, the distinction between the *original* and the *acquired perceptions* of sight—to teach, indeed, the "art of seeing things which are invisible," as Dr. Reid has not unhappily expressed it. Berkeley clearly proved that distance, magnitude, position, and solidity, are not strictly to be called *visible*; that is, they are not the true and immediate objects of sight. By sight we see only coloured light; all the rest we learn solely by custom and experience. We learn to see just as we learn to speak and to read, only that we learn it more easily. On account of the instantaneous and almost uniform judgments which we very early form of the above-named affections of objects, we are induced to suppose that we have only to open our eyes, and thus to solve the whole mystery of vision: but we are deceived; we require the aid of our other senses. If we had only the sense of sight, we should have no means of determining anything but colour.

We have no proof that the true province of vision, as distinguished

from that of the other senses, was known to any of the ancient metaphysicians. It is remarkable that Aristotle himself, by far the greatest philosopher of antiquity, has actually particularized the senses of seeing and hearing as examples of faculties which do not depend on custom or habit in their exercise, but give us immediate knowledge—making no distinction between what is direct and natural, and what is so obviously acquired, in these perceptions.* It is more surprising that Condillac, one of the most ingenious and popular of the French metaphysicians of the eighteenth century, and who had studied Berkeley's "Theory of Vision," should have argued at length, in his "*Essai sur l'Origine des Connaissances Humaines*," against the English doctrine of the acquired perceptions of sight; affirming in so many words that "the eye judges *naturally* of figures, of magnitudes, of situations, and of distances,"† and this, forty years after the publication of Berkeley's work. It is but fair to add that Condillac was afterwards convinced of his error, and expressly retracted it. It is perhaps still more singular that an attempt was made by an ingenious writer,‡ not many years ago, to prove the unsoundness of Berkeley's theory of vision—we hardly need say, as appears to us, with entire want of success.

Berkeley's psychological views on this subject have now long since been incorporated into the elements of optical science; and they were strongly corroborated, within twenty years of their being first promulgated, by the case of a youth who had been blind from infancy, who was operated on for cataract and restored to sight by the eminent surgeon Mr. Cheselden. The patient felt that everything was in his eye at once—of distance he could form no judgment till he had learnt it by experience. He knew a dog from a cat by feeling, during his blindness; but when couched he had to form the associations between feeling and sight, before he could distinguish them with his eyes open. At first he did not know by sight the shape of anything, nor could he distinguish magnitudes in this way. In short, Berkeley's theory was entirely established; and subsequent cases of couching, which have sometimes been put forth as opposing it, have when fairly examined been admitted to agree with it.

Though no one had ever before pursued the true theory of vision, as Berkeley did, to the extent of marking a new epoch in psychology and optics—it must not be supposed that in his hands the theory was in all its elements original: indeed he did not himself claim that it should be so considered; but rather that it was partly a correction, partly an extension and completion of principles which had been

* "*Ethic. Nicomach.*" lib. ii. cap. 1.

† Sect. vi.

‡ "A Review of Berkeley's Theory of Vision;" by S. Bailey, 1842.

partially admitted or hinted by previous philosophers. The "Optics" of Alhazen, and the "Optica Promota" of James Gregory, among other writings on the same subject, may be named as examples. Malebranche also had clearly anticipated some of the metaphysical bearings of the subject. Nor must it be forgotten that our immortal Locke himself had already shown his remarkable sagacity in anticipating the fact, as proved by Cheselden's patient, that a blind man when first restored to sight would not know a "cube" from an object of any other figure. Indeed Locke had been even more explicit: he says, respecting perception, that "the ideas we receive by sensation are often altered by the judgment, without our taking notice of it." He instances a globe, which when before us presents to our minds the "idea of a flat circle variously shadowed," while "our judgment by habitual custom frames to itself the perception of a convex figure." He also alludes to painting as illustrating the same thing. He adds: "Space, figure, and motion, by their several varieties, change the appearances of light and colours which are the proper objects of sight; so that we bring ourselves by use to judge of the one by the other. This, in many cases, by a settled habit of things whereof we have frequent experience, is performed so constantly and so quick, that we take that for the perception of our sensation, which is an idea formed by our judgment; so that one, viz. that of sensation, serves only to excite the other, and is scarce taken notice of itself."* From this language of Locke, it is clear that he really did, in the main, anticipate the very same conclusion respecting the effect of association and habit on our perceptions of sight, which Berkeley developed in detail; and which renders his "Theory of Vision" so valuable a contribution to human knowledge, and especially to mental philosophy—we may say the best of his contributions.

It is, however, his psychological theory—in fact his reduction of the whole universe to a psychology, that has distinguished him as one of the acutest and boldest, if not most satisfactory of thinkers. His theory may be equally well learned from his "Principles," or his "Three Dialogues." In the former, however, there is greater condensation; while the latter are by far the more lively and amusing. His learning in the history of philosophy is but little shown in these works: he seldom mentions the names either of ancients or moderns; but originality of thought and illustration ever, where abounds. Alarmed at the irreligious and atheistic tendencies which he saw threatening, in his day, and thinking that they depended for support mainly on the prevailing notions about *matter*, he was led to inquire into the

* "Locke's Essay;" book ii. chap. 9, § 8, 9.

claim which these notions had to our belief, and finally to reject them altogether. Materialism he held to be not only the chief "ground of scepticism, atheism, and irreligion;" but at the same time the "chief cause of error and difficulty in the sciences." With regard to religion both natural and revealed, Berkeley was somewhat visionary in his expectations of the benefits which would arise, if immaterialism could but prevail. He thought that if the common theory of matter were once banished, much would be done for Christianity, and against certain forms of unbelief.* But how closely blended with unbelief has been the idealism which has been developed in the third period of the German school of philosophy! We fancy that Berkeley would not have found some of these idealistic theories a whit more to his mind, as to their religious bearing, than the materialism of which he had so characteristic a horror; and would have acknowledged, had he been witness of their rise and progress, that it must take something more than the overthrow of all materialism to destroy unbelief, and to regenerate the world.

Berkeley's views, though minutely unfolded and at great length in his works above-named, are more capable perhaps of being condensed within a small compass than most philosophical theories. We shall endeavour to give as brief a compend of them as possible.

He holds that the opinion that we have a power of framing *abstract ideas* is to be specially deprecated,† as having led men to these notions about a material universe. He admits that we have "general ideas," but not "*general abstract ideas*;" which we certainly have not, in the sense Berkeley intends (evidently that of the scholastic Conceptualists); for undoubtedly we cannot frame in imagination the picture of a triangle which is of no species, and yet of all, at once, as Locke describes, not very happily, in his Essay:‡ but we can readily think of some quality in which all triangles agree; and we can use one, therefore, as the representative of all. Having fairly demolished abstract ideas, in the above unintelligible signification of a sensuous form or *schema* including various species, our philosopher considered that he had given a fatal blow to the doctrine of a *substratum*, or support of sensible qualities or phenomena, such as matter is held to be. These sensible qualities, he maintained (as being only in us), require no synthesis or bond to unite and sustain them,—all such synthesis is merely the invention of our own imagination; it is purely mental.

Locke had maintained that all our knowledge consists in the recognition of the relations of our ideas, not marking the distinction between logical and psychological judgment, though admitting the latter

* "Principles," 95, 96.

† *Ibid.* Introd.

‡ Bk. iv., chap. 7, § 9.

clearly enough under the name of intuition. Ideas, then, are the true objects of knowledge. Very right, said Berkeley, according to the ancient Platonic doctrine; and he added: "It is evident that the objects of human knowledge are either ideas imprinted on the senses [sensations], or such as are perceived by attending to the passions and operations of the mind; or lastly, ideas formed, by help of memory and imagination, from those originally perceived in the aforesaid ways."* It is evidently with the first kind of ideas that Berkeley's theory has mainly to do. Thus, for instance, a certain well-known collection of our ideas which have always been found connected, are signified by the name *apple*; other collections may be a tree, a book, etc., respectively. Now these ideas can only exist in a mind which perceives them, and the existence of our minds is here assumed on the alleged testimony of consciousness. And as all allow that our passions and fictions of imagination do not exist externally to the mind, so it is not less evident, says our author, that "the various sensations or ideas imprinted on the sense, cannot exist otherwise than in a mind perceiving them." This Berkeley regards as intuitively proving that the objects which we call material are nothing more nor less than sensible ideas, or sensations. "The table I write on exists, that is, I see and feel it; and if I were out of my study I should say it existed, meaning thereby that if I was in my study I might perceive it, or that some other spirit actually does perceive it. For as to what is said of the absolute existence of unthinking things, without any relation to their being perceived, that seems perfectly unintelligible. Their *esse* is *percipi*, nor is it possible they should have any existence out of the minds of thinking beings which perceive them."† "It is indeed an opinion strangely prevailing amongst men, that houses, mountains, rivers, and, in a word, all visible objects, have an existence natural or real, distinct from their being perceived by the understanding. Yet whoever shall find in his heart to call it in question may, if I mistake not, perceive it to involve a manifest contradiction. For what are the forementioned objects but the things we perceive by sense, and what do we perceive besides our own ideas or sensations?"

Now, says our author, since the objects of sense, which are my own ideas (sensations) when I am recognizing them, evidently exist when I am absent from them, they have a real existence; and as they can only exist in a mind, there must be some other spirit wherein they exist, in the intervals between my perceiving them; there is therefore an infinite, omnipresent Spirit who contains and supports them. This is Berkeley's *main argument* for the Divine existence, and he holds it

* "Principles," 1.

† Ibid. 3, 4.

to be irresistible. Philonous says to Hylas, in the Second Dialogue that he differs from the philosophers who say, "There is a God, therefore he perceives all things;" whereas, in order to state the whole case, they ought to say, "Sensible things do really exist, and are necessarily perceived by an infinite mind; therefore there is an infinite mind, or God." Philonous adds, "This furnishes you with a direct and immediate demonstration, from a most evident principle, of the being of a God. Divines and philosophers had proved beyond all controversy, from the usefulness and beauty of the creation, that it was the workmanship of God. But that an infinite mind should be necessarily inferred from the bare existence of the sensible world, is an advantage to those only who have made this easy reflection; that the sensible world is that which we perceive by our several senses; and that nothing is perceived by the senses beside ideas; and that no idea or archetype of an idea can exist otherwise than in a mind." Thus does Berkeley rest the chief argument for the being of God on the assumption that the objects of nature are neither more nor less than our perceptions of sense; which objects are nothing but as perceived; so that, as they are not always perceived by man, they must have an omnipresent mind to exist in. Elsewhere, however, it is fair to say, Berkeley dwells eloquently on the argument from causation; there are agencies at work producing in us the ideas which are the actual objects of nature—what are these agencies?—the perpetual actings of the Creator.

In support of his theory of the utter inconceivableness of material things as substances, Berkeley (alluding probably to Locke's statement that "the ideas of the primary qualities of bodies are resemblances of them, and their patterns do really exist in the bodies themselves"*) maintains that ideas can only resemble ideas, which is strictly true; but he need not, on this account, have denied that external causes may be adapted, we know not how, to excite in us certain sensations and ideas. Again: as we "only know by sense and reason, and as neither informs us of the unperceived material *substratum*, but only of our sensations and ideas," says our author, even if there *were* solid bodies without our minds, we could never know the fact. That we may have all the ideas of matter which we now have, in "dreams and phrensies," is granted by all, when there is no matter causing them, so that at all events matter is useless, since we can have all our ideas without it.†

In justice to Berkeley we must say that there is nothing which he more insists on than that, on his principles, "each part of the mundane system is as much a *real being* as on any others." He must mean, how-

* "Essay," ii. 8.

† "Principles," 8, 9, 10, 18.

ever, that the actual operations of the laws of nature, that is, the constant agencies of the Creator, are real facts occurring in the consciousness of minds. He can or ought to mean nothing more; for he constantly asserts that our own subjective states (sensations) *are* the objects around us. He allows to spirits the name of substances, and to them alone. On this point he is very decided, talking of spiritual *substance* as something beyond its attributes or qualities, just as most men talk of *matter* as something beyond the properties which belong to it. He remarks that no idea can be formed of such a spirit; for "all ideas being passive and inert, they cannot represent to us, by way of image or likeness, that which acts." His language, however, respecting spirit, is frequently obscure. It occasionally seems idealistic even in the most absolute sense of the Germans: for he sometimes perfectly identifies understanding and will with soul and spirit. But it is evident, on the whole, that he means to admit some being that is distinct from its own acts, and is called spirit; for he says, "it must be owned that we have some *notion* of soul," and its operations; and he speaks of it as an agent, and as the only substance or support wherein unthinking beings or ideas can exist. Soul, spirit, and substance mean a "real thing," not an idea. "What I denote by the term *I*, is soul or spiritual substance." It is an active being, the existence of which consists in perceiving ideas and thinking."* This last statement, again, (such is the fluctuation of Berkeley's language,) might readily be construed into absolute idealism, in the later German sense: and there are other passages of the same kind; in one at least of which our author speaks, in an apparently slighting manner, of the common distinction between will and understanding, and a substance supporting these powers. In fact Berkeley is not always consistent with himself, and this is an example: for he constantly applies the term substance to mind, while he stoutly and uniformly denies it to everything else. Charity, therefore, must conclude that he did not mean to imply, with Hume, that sensations and ideas are the only things in the universe; or, in other words, that God and created spirits are mere conventional terms, amounting to nonentities; for he expressly excludes them from being "ideas;" and speaks of them as "active, simple, uncompounded substance, which cannot possibly be affected by the decays which befall natural bodies."†

Berkeley's hypothesis produced no inconsiderable noise in the reading world when it first became known; and it was just the kind of thing to furnish a very cheap and easy theme for ridicule. Arbuthnot wrote to Swift: "Poor Berkeley hath now the idea of health; which was

* "Principles," 27, 135, 139.

† Ibid. 14.

very hard to produce in him, for he had an idea of a strange fever on him." The most absurd thing of all was Beattie's angry declaration that if these principles prevailed, they "would soon issue in the extermination of the human race!" Berkeley's doctrines, however, were adopted by Bishops Sherlock and Smallridge; and afterwards by Drummond and Kirwan. Dr. Reid, whose criticisms of Berkeley are not always very analytical, discriminating, or candid, admits that he at one time fully believed his doctrine. The following is the way in which Berkeley was wont to reply to some of the most ludicrous or popular objections which have been made to his views—objections such as the above, and which we would strongly recommend to the adoption of all superficial readers of a little philosophy, who are solicitous to show their wit.

"You say, it sounds very harsh to say we *eat and drink ideas*, and are *clothed with ideas*. I acknowledge it does so, the word *idea* not being used in common discourse to signify the several combinations of sensible qualities which are called *things*; and it is certain that any expression which varies from the familiar use of language will seem harsh and ridiculous. But this doth not concern the truth of the proposition, which is no more than to say, we are fed and clothed with those things which we perceive immediately by our senses. If, therefore, you agree with me that we eat and drink, and are clad with the immediate objects of sense which cannot exist unperceived or without the mind, I shall readily grant it is more proper or conformable to custom that they should be called things rather than ideas."*

Hylas, in the Third Dialogue, asks whether it does not follow from the principles laid down, that "no two men can see the same thing? and is not this highly absurd?" Philonous replies: "If the term *same* be taken in the vulgar acceptation, it is certain (and not at all repugnant to the principles I maintain) that different persons may perceive the same thing. Words are of arbitrary imposition." Berkeley then enlarges on the ambiguity of the word *same*; and says that "same" may be very well applied to "agreement in perceptions: the dispute is about a word. I know not what you mean by the *abstracted idea of identity*; and should desire you to look into your own thoughts, and be sure you understand yourself, Hylas. Take this further reflection with you: the materialists themselves acknowledge what we immediately perceive by our senses to be our own ideas. Your difficulty, therefore, that no two see the same thing, makes equally against the materialists." Thus did our author dispassionately show that if his system was to be confuted at all, it must be by some other method than popular objections and claptrap ratiocinations; and

* "Principles," 38.

thus dexterously did he avail himself of the *argumentum ad hominem* in allusion to the theory so long current in the schools—that all our knowledge can only be of our own ideas.

Berkeley's whole argument reduces itself to two aspects: one is, that we have no evidence of what is called a material world; all that we know may be given to us without it: and even if there were such a world we never could know it; for whatever knowledge we have of outward things must be by the senses, which can only give us knowledge of our own sensations; and these sensations, being affections of mind, can have no resemblance to a thing which is unthinking and inert. The other point of view regards Berkeley's assertion of the impossibility and absurdity of a material world; for he pronounces most confidently that "the existence of bodies out of a mind perceiving them is impossible, and a contradiction in terms."*

The latter and most dogmatical part of Berkeley's theory, is entirely destitute even of plausibility; and appears to us opposed to what might have been expected from his devoutly religious character. For who shall set limits to the Divine Omnipotence! Of course, logical contradictions involve impossibilities; and they express what cannot be conceived of as having any relation to the Divine power: as, for example, that a square may have *five sides*; or that a triangle may be constructed which has the sum of its angles equal to *three right angles*. But where is the logical contradiction of supposing a material world? If it be in the power of God to produce all our present sensations and ideas by his own immediate agency, without the intervention of any *third* existence of any kind between us and Him; and to do this in such a way as that we shall always be irresistibly, though by an illusion, led to believe in this *tertium quid*—something different both from Himself and from ourselves, and from our own bare sensations or ideas, and which immediately causes them—(and that it is quite conceivable that the Deity might do so if it pleased Him, we are far from denying:) then, on the other hand, what earthly or heavenly reason can be assigned—why it cannot be regarded as a possible exertion of the Divine power that the Creator should, amidst his infinite resources, form an existence that should not have the attributes of thought, feeling, and will, as *mind* or spirit has—but which should have a totally different set of attributes, by means of which sensations and ideas should be produced in us? And if it be asked how could anything but spirit act on spirit?—the retort is ready, how can or does spirit act on spirit? We know not how. It does, certainly, appear to us to require a little more boldness than is worthy of a cautious

* Second Dialogue.

inquirer after truth, to assert that it would be a logical absurdity to suppose that God may choose to deposit in an unthinking existence (matter) certain forces which shall act on us, according to what we term the laws of nature. Yes, undoubtedly matter *may* exist—it is not an impossibility or an absurdity, at all events; and if we were very eager to saddle men's theology with the vices of their metaphysics, we should be disposed to say that to pronounce "unthinking substance impossible" is next-door to presumption. But we would rather call it a violent assumption; or if we regard it as a conclusion—a conclusion resting on nothing but assumptions for premises.

The other part of Berkeley's speculations, in which he virtually challenges his opponents to *prove* the existence of a material universe is, of course, less easily capable of being dealt with. For how can we prove what seems to present itself to our faith, every moment, with such direct and commanding self-evidence as to defy and supersede all proof—a self-evidence second only to that of our own thinking existence? It is enough, however, if we are right in saying that Berkeley, with all his acuteness and aptness for the subtleties of metaphysics, has not one whit shaken the doctrine of a material world: he has left the question just where he found it. His whole theory is based on *assumptions* from beginning to end—assumptions sometimes his own, sometimes adopted from the current philosophical opinions, or from his view of them—but assumptions still; and these assumptions are not seldom blended with inconsistencies and inconsequences.

It would be easy to bring forward germs and analogies of Berkeleianism among the ancient Greeks. Even in Plato we find the suggestion that it would be difficult to prove that the life of man is not a continued sleep, and that all our thoughts are anything but dreams. But among the Sophists and the Sceptics we have what is bolder than conjecture. Protagoras maintained that thought is sensation, and that all our knowledge is phenomenal. Berkeley himself cannot be excused from having dogmatically confounded sensations with ideas and perceptions. Protagoras also said that "man is the criterion of all that exists; all that is perceived by him exists; that which is perceived by no one does not exist."* This is a sort of Grecized Berkeleianism. Our philosopher had an example of cosmothetic doubting nearer home, in Descartes; who, however, finally anchored his belief of materialism in the "veracity of God."† Malebranche rejected this argument, in one sense, but adopted it in another; for he admitted the existence of matter only as what he conceived to be a

* Sextus Empiricus, "Hypotyp. Pyrrhon," 44.

† "Sixth Meditation." It is remarkable that Descartes put down, among the possibilities, a theory of idealism precisely identical with that of Fichte.

revealed truth. Berkeley, as we have already seen, regarded himself as authorized by Locke, and the current opinion of the day, to connect the theory of matter with the dogma that "the primary qualities of body are resemblances of our sensations." Now, on this latter assumption, we take it, the whole gist of that part of his argument in which he attempts the disproof of matter, may be said to lie. Probably the briefest form in which this doctrine can be put is the following conditional syllogism: "If matter exists, it must resemble the ideas which we have of it in our minds: but the properties of an unthinking being cannot resemble the ideas of a conscious mind; therefore matter does not exist."

Now we hold with Berkeley, that our ideas and sensations can only resemble our ideas and sensations: these modifications of a conscious being can only have a mutual resemblance. The idealistic theory of resemblance must, therefore, be abandoned. But when our philosopher asserts that if matter exists, it must thus resemble the idea we have of it in our minds—we regard his position as a sheer assumption. Matter cannot be inert and extended, he says, unless mind be inert and extended. Now this was saying that the cause must necessarily resemble the effect. This is an assumption which would involve the most absurd consequences. Does the energy of will, or of any nervous force which our will excites to action, to move our arm, resemble the motion itself? Does the Deity who immediately produces, according to Berkeley, all our sensations, resemble those sensations? Does the view of impending danger resemble the emotion of terror of which it is the cause? And is there not, moreover, in Berkeley's system a kind of confounding of cause with effect? We are told that sensible ideas (the only *things* in the world) are now in our *own* minds, now in the mind of God; who presents them in our consciousness according to his own laws. These magical ideas are, of course, effects when they exist in our minds; but we are told they have an existence in the mind of the "Eternal Spirit," when no created being is conscious of them—what then are these same things now but causes, causes which are to become effects when creatures are experiencing these sensible ideas?

Again: what strange consequences follow from Berkeley's distinct assertion that the sensible world has an existence independently of our minds; while at the same time he maintains that when I am pointing to an object, this object has no existence external to my mind! This table is my sensation, and yet this table (my sensation) can have and must have an existence out of me! Where, then, is now the sensation?—in the Deity, who is a spirit! There is nothing but mind, says our author, existing in the universe—all else is but a modifica-

tion of mind : and yet the modifications of my mind have an *existence* apart from my mind. The fact is, that Berkeley's language is often liable to the most contradictory interpretations—interpretations which, of course, he would in his own way have sought to repudiate. We have too, in this system, it would seem, a kind of syncretism of inconsistent idealisms. While Berkeley would annihilate matter, he speaks of sensible objects in a way which is only due to things which are separate entities, and which in some inconceivable way may pass from one mind to another. These sensible ideas exist at this moment in my mind ; but they will not do so when I am asleep. They exist *then*, elsewhere. But what are these existences, which can have, elsewhere, all the being which they have now in my own mind ? They are, Berkeley tells us, not active things—they are passive and inert ; and we have seen that their residence may be reciprocated from mind to mind. These statements cannot but suggest to the student of the history of philosophy some of the dogmas of the ancient atomic idealism of Leucippus, Democritus, and Epicurus, as we have it described by Lucretius, in his poem “*De Rerum Naturâ*”—a theory from which, of course, Berkeley recoiled with horror.

Again : Berkeley says that by our senses we have no knowledge of anything but our sensations and impressions of sense ; and this is said with a view to get rid of all basis for any positive real being distinct from mind. Now, it should be remembered that while sense can only, in itself, convey to us sensations, our senses do not act alone, but in connexion with the intellectual faculty, which peremptorily tells us that they must have a cause ; for to believe in causation is constitutional to the human mind. True, we cannot *prove* that every change must have a cause ; but we cannot deny it—we cannot doubt it. Does not every rational being *know* that each event which happens in the universe around us, must have its cause ? But what is the origin of this knowledge ? The reply is : sense gives us changes, events, effects ; but the intellectual faculty, on occasion of the experiences of sense, rises beyond experience to the necessary and universal truth that every change must have a cause, in all time, and in all worlds. Berkeley's principle, therefore, that sense can give us sensation alone, falls decidedly short when put forth as an argument against matter, however true it is in the letter.

Nor is it of any avail to our author to attempt to include the whole of our knowledge within the limits of our immediate consciousness. We are not concerned with the opinions respecting ideas which Berkeley either found, or supposed he found, current in his day—we limit our criticism to his own assertion that all the “objects of human knowledge are either ideas imprinted on the senses ; or such as are

perceived by attending to the passions and operations of the mind ; or lastly, some combination of the above by memory and imagination." Now this doctrine, we should remember, is propounded with the view of upholding the principle that we cannot know matter, because our knowledge is limited to the modifications of our own consciousness ; but, if so, then how can we know mind ?—how can we know God ? Berkeley constantly proceeds on the understanding that our knowledge does extend to the assurance of the existence of ourselves, of mind, and of a Deity. He distinctly says that mind is the only substance in the universe, and he speaks of its powers ; but how, on his principles, is he entitled to this dogma ? We do not perceive *self* as we perceive its modifications ; we do not take direct cognisance of the substance mind, as we do of its attributes ; we do not perceive God by any intuition, sensuous or intellectual, as we perceive his operations. Berkeley did not deny that all properties imply a substance : but he chose to assume that all properties are properties of mind. Hume saw that, on the principle that we can know nothing but our own ideas and "impressions" (sensations), we are not entitled to affirm any substances—either a created mind (not even a *me*) or a God. Mankind, says Hume, in his "Treatise of Human Nature," are only a "bundle of perceptions." According to him, mind is as much a mere synthesis of properties as matter is. We do not see that this deduction was anything more than the legitimate climax of that idealism which led Berkeley to reduce all the material universe to a mere synthesis of the imagination—a synthesis of sensations, not a substance possessing its own qualities and powers.

We maintain, therefore, in conclusion, that Berkeley's idealism is, after all, incompetent to the grand object he had in view, the establishment of a pure immaterialism on the ruins of matter. He as much assumes the existence of the human soul, as mankind in general assume that of the substance matter. He assumes a Deity as a necessary depository of ideas, even more than he assumes his necessity as a Creator. He argues against matter as an unperceived *noumenon*—he admits mind, a *noumenon* equally unperceived. If the material universe be only an idea of our own, why not also the spiritual ? If it be replied, there must be causes—then how do we know them, since they are not our own consciousness, but only a rational suggestion, inference, conclusion, intuition—call it what we may.

We have only to repeat that Berkeley's whole argument against the existence of matter, ingenious and subtle as it is, and propounded with extraordinary ability, leaves the question just where it was before—just where the Greek sceptics left it, two thousand years ago, and more. The ultimate basis of human knowledge has always been as-

sailed by scepticism, because it admits not from its very nature of being fortified by proof; and yet our most certain knowledge reposes on no other foundation than self-evident principles. What matter is, has long been a puzzle to natural philosophers; but even the dynamic theory of it, which goes the farthest way towards Berkeley's denial of its substantial existence, is far enough from the assumptions, the extravagances, and the final goal of his system. The machinery of this system, we are bold to say, instead of clearing up any difficulties and making everything plain, as the author supposed, has but introduced further grounds of scepticism. If the advance of the human mind out of the immediate sphere of its own subjective consciousness to *objective* knowledge is a puzzle, Berkeley has not solved it by confining matter wholly to the sphere of consciousness: he has only cut the Gordian knot, by an hypothesis which would prove too much even for his own ultimate purpose—he has not untied that knot.

ART. V.—AMERICAN PSYCHOLOGICAL LITERATURE.

A PRESSURE of domestic intelligence, relative to the special subject of this journal, has alone prevented us from bringing prominently before our readers the various papers that have appeared from time to time in our able transatlantic contemporary, the *American Journal of Insanity*. We always read this periodical with much pleasure and satisfaction. It is conducted in a liberal, humane, enlightened, and philosophic spirit, free from all those narrow and restricted views that so frequently destroy the practical operation of all psychological inquiries. The editors and contributors to the *American Journal of Insanity* are physicians immediately connected with asylums, and practically conversant with the treatment of the insane. This gives great force and value to their writings. In the recent numbers of the journal, Dr. Kirkbride has been publishing a series of important papers on the "Organization of Hospitals for the Insane," replete with valuable suggestive matter. These papers have appeared in a separate volume, which will be reviewed on another occasion. Dr. Kirkbride writes like a man who has made good use of his eyes. It is said, that "*to see* is not always *to observe*:" but Dr. Kirkbride demonstrates to us that he is able to exercise both powers, and that his faculty of observation is as keen as his sense of sight. We particularly call the attention of all connected with the management of our institutions, both public and private, to this valuable series of papers. The memoir of Dr. Bell, in the October number, is written in a kind and Christian spirit, and, as the record of the life of

a man who devoted his best days in promoting the interest of the insane, it is well worthy of perusal. Dr. Galt's "Essays on Insanity in Italy" are highly valuable. The proceedings of the "Association of Medical Officers of American Hospitals for the Insane" are fully reported in various numbers of this journal, and are deeply interesting. We cannot allow this opportunity to escape without thanking the editors of the *American Journal of Insanity* for the kind and generous way in which they invariably have spoken of our humble labours to promote the advancement of psychological literature. The last number of this journal contains a review of Dr. Tuke's prize essay on the "Moral Management of the Insane." The writer of the criticism makes the following sensible remarks on the subject of "Mechanical Restraint in the Treatment of the Insane:"

"Dr. Tuke, after calling to mind the management of the insane prior to 1792, traces the progress of that reform which was commenced simultaneously at that period by Pinel in France and his own progenitor, William Tuke, in England. He views with great satisfaction the prevailing disuse of restraint, and though he does not distinctly favour its entire abolition, yet he intimates that, by the aid of certain practicable substitutes, it may be almost, if not altogether, dispensed with. He pretends to no original ideas on the subject, nor does he go into a very elaborate examination of the merits of the question. This we rather regret, because the friends of the non-restraint practice must now be able, if ever, to meet the objections which have been offered against it. That they never have been fairly disposed of, we firmly believe. On the contrary, if there is any one fact in the management of the insane better settled than any other, we are convinced that it is this—that there are cases of insanity, more or less frequent, in which the highest welfare of the patient is promoted by mechanical restraint.

"Considering how little restraint has been used, for many years, in the principal English establishments, we cannot help thinking that the importance of this question has been greatly over-rated. If the superintendent of a hospital has reason to think that a case occasionally occurs—one or two in a hundred—which is benefited by mechanical restraint, why should he not be allowed to use it? Why should uniformity be required in the matter more than in any point of treatment? If he may be allowed to use narcotics, for instance, or cold baths, or hot baths, to an unprecedented degree, and be praised, perhaps, for his boldness, it is not very obvious why he should be denounced, or regarded as behind the age, because in a few cases he approves of confining his patient's limbs with a bit of leather. If, in 1815, when the monstrous abuses of the English hospitals were brought to light, the cry of 'No restraint' had been raised, it would have been abundantly justified. But it was just at the time when the spirit of improvement had reduced the amount of mechanical restraint to almost nothing—when, in short, this remarkable reform might be safely left

to take care of itself—that the public was agitated with this controversy about non-restraint. In the Lincoln Asylum it seems that, from 1829 to 1837, the amount of restraint steadily diminished from thirty-nine, the number of patients being seventy-two, to two, while the number of patients had risen to 130. And yet, in the face of this experience, it was resolved, in the last-mentioned year, to abolish the use of mechanical restraint in every case whatever. A similar piece of history, we presume, would be furnished by many other establishments. We have always supposed that in England the hostility to restraint arose from the fact that in their very large establishments it was quite impossible for the physicians to regulate the application of restraint by their own knowledge of the exigencies of the case, and thus prevent it from becoming, in the hands of attendants, an intolerable evil. Some of the distinguished advocates of non-restraint, we are aware, place themselves upon higher ground than practical expediency. They oppose restraint because, they say, it is never necessary, and always injurious. This conclusion, however, appears to be more like an extravagant expression of warm and earnest feeling, than the result of careful experiment or extensive observations.

“The manner in which this subject has been forced upon the public notice has led, we fear, to another kind of restraint more to be deplored than any that was ever placed on the limbs of the insane. When conversing on this question with the superintendents of hospitals, while in England, a few years ago, we thought we sometimes perceived a fear of maintaining individual convictions against a public sentiment which had become intolerant and proscriptive. When a vexed question has a popular side to it, there is no longer freedom of opinion, nor real progress; because, rather than incur the popular odium, a man will be apt to keep his opinions to himself, instead of permitting them to shape his own practice, and, as far as they deserve, the practice of others. We have no hesitation in saying that the state of feeling and thinking on this subject of restraint, in England, is not that, exactly, best calculated to advance the interests of science or humanity.

“Dr. Tuke *burns*, as we say of children playing at *hide and seek*, when he declares that the non-restraint system can never become practicable nor beneficial, unless the government of the asylum is of a very high moral character. If the character of the management is so effectual in preventing the incidental evils of non-restraint—in making it, as he says, a blessing instead of a curse—it would seem to be an easy inference that it would be equally effectual in preventing the abuses of restraint. So that, in fact, as it respects the welfare of the insane, the really important issue is not between restraint and non-restraint, but between a government which is actuated by high moral considerations, using every available means to promote the good of the patient, and by kindness and vigilance averting every unnecessary abuse, and one careless and indolent, swayed by one idea, and anxious only to catch the popular breeze.

“In this country, fortunately, the question of restraint or non-restraint has always been viewed as one of subordinate importance. We

seldom hear it spoken of; and in the meetings of the Association of Superintendents of Hospitals it has never, to our recollection, been a subject of discussion. And yet, we apprehend, it is not often used to an unnecessary extent, even in those hospitals which are most poorly endowed with what Dr. Tuke regards as indispensable substitutes for restraint. It seems to be understood among those who are devoted to this department of the profession, that every one must judge for himself whether the amount of restraint shall be reduced to one per cent. or to zero, and that his conclusion on this point, whatever it may be, cannot fairly subject him to censure. Here, as well as everywhere else, the privilege of free and independent inquiry cannot be invaded without ultimate injury to the cause. If the time should ever come when the superintendents of our hospitals will be obliged to enter upon their duties with the details of their management all prepared for them, seeing everything with the eyes of others, and governed by popular sentiment rather than the sense of right, that time would witness the end of all genuine progress. Let us beware how we allow the first step to be taken in this direction, and resist every attempt to prescribe opinions and practices which should flow only from one's own honest and deliberate convictions."

In noticing the two medico-juridical trials, reported in the October number of the "Psychological Journal," viz., the will case, *Robarts v. Kerslake*, and the criminal case of *Mrs. Brough*, the editor expresses his concurrence in the medico-legal view taken by the editor of this journal of these two important cases. This cannot be otherwise than highly gratifying to our feelings. Of the former case, the editor observes, after detailing the salient points given in evidence,

"A careful perusal of all the testimony leads to the conclusion that Mr. Roberts was insane when he executed his will. The act itself, right and proper as it may have been, does not argue that the mind of the testator was sound."

In reference to the case of *Mrs. Brough*, the editor remarks,—

"We have given all the important testimony in this case, which Dr. Winslow justly remarks, is destined, 'from its peculiar features, to take a permanent position among the *causes célèbres* of British criminal jurisprudence.' The acquittal of the prisoner on the plea of insanity is a recognition of a form of mental disease—or, to speak more correctly, a phase of mental disease—which has usually been regarded by English and American courts as simply the exhibition of ungoverned passion, the consequences of which, if injurious to others, should subject the individual to punishment. Every one at all familiar with the insane knows the power of the passions and impulses over the actions, when the self-conscious, self-governing principle is impaired or suspended. In the case of *Mrs. Brough* we have a mother who has always been kind and indulgent to her children, and had just nursed them through a long illness. She had previously suffered from cerebral disease and

paralysis. She is detected by her husband in what he believes to be a criminal intimacy, and he at once leaves her. Now, here is a great moral shock—a sufficient cause for the sudden development of a paroxysm of mania in a person whose brain was already diseased. But it is said that the act was prompted by revenge,—that she had been detected in infidelity to her marriage vow, and fearing that her children would be taken from her, and that she would be thrown, an outcast from society, upon the world's cold charities, she deliberately and with malice committed the horrid deed. The history of the case, however, precludes such an opinion, and we are pleased to see a decision founded alike upon justice and humanity."

Original Communications.

ON THE USES AND INFLUENCE OF MENTAL PHILOSOPHY.

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THERE are few, if any, branches of study of such vital importance, that are so often wholly neglected, and so frequently little appreciated, as Mental Philosophy. Whilst our knowledge of the laws of nature has been continually progressing, and every year has been bringing fresh and valuable accessions to our previous acquaintance with the physical sciences,—mental science has, on the other hand, made comparatively little advancement. When we consider the marvellous progress which has been attained in the arts and kindred sciences, and that man has carried his researches so far into the arcana of nature, that she has been made to reveal herself in some of her most lovely forms and wonderful combinations; we are surprised that the science of mind—the science which treats of that curious instrument by which all these glorious results have been obtained—should have made little progress. The slow progression of mental science has been chiefly owing to that desire in the human mind, which is more particularly directed to the study of those branches that affect the physical wants—the comforts and convenience of mankind—rather than to those of a merely intellectual character. The prejudice against psychological investigations, and the mistaken notion of their utility, which exist in the minds of the majority of mankind, together with the generally acknowledged greater difficulties that are encountered in the study of mind than what are experienced in the study of matter, also partly account for the comparatively slow progress of mental science. Yet mental science has not been barren of cultivators. From the time of Thales, the Grecian sage, down to the present time, some of the greatest minds, and most profound thinkers that have

ever lived, have been engaged in its elucidation. However, from many of these philosophers having started on wrong principles, and having attempted explanations of things beyond the province of the human intellect, their works have been productive of little or no benefit to mental science. Though many works on mental science will merely awaken wonder at their production and object in the minds of those who peruse them, and not a few will be buried in oblivion; yet many writings on this science, both of ancient and modern times, distinguished for their great utility, and bearing upon them the stamp of true genius, will remain, through all time, the noblest productions of human reason, and imperishable monuments of departed greatness, of intellectual worth, of true nobility.

However much mental science may have been obscured, and its progress retarded by the subtilities, false theories, idle speculations, and mysticisms of authors, and by other causes just alluded to, it must nevertheless be admitted that the study of the human mind is one of the noblest and most important which can engage the attention of mankind. That on which Socrates discoursed, on which Plato reasoned, on which some of the ablest and best of men, in all ages, have exercised their thoughts, on which so much genius and philosophy, so much research, labour, and piety have been expended, cannot be indifferent to mankind in general. It surely concerns man to know the powers and susceptibilities of that Divine essence, that mysterious principle within him, which thinks, and wills, and reasons; which elevates him above the irrational creation, and gives him the mastery over the material world; which enables him to survey the past, and anticipate the future, and to rise from the contemplation of the finite to the infinite, from the visible to the invisible; which raises him to the semblance of an angel, or sinks him to the level of a fiend, and which is destined to endless woe, or to everlasting bliss. Shall man, then, carry his researches into every department of the arts, and attempt with unabated ardour to sink the "plummet of his intelligence" still deeper into the abyss of infinity, and watch the operations of nature in her varied and most secret haunts; and shall he not turn his thoughts, and observe the curious phenomena, the wondrous world of thought and action, that is constantly going on within himself,—phenomena, more curious, more wonderful by far than any which physical science or art can reveal, or that the busy artist, nature, throughout her wide and inexhaustible domain, can exhibit. It is no doubt necessary and useful for man to know the laws which govern the material universe, as well as to attend to the various arts which support and embellish life; yet "the proper study of mankind is man."

It is surely of the utmost importance to every man to be acquainted

with the phenomena of mind, to be familiar with the laws which guide the operations of that instrument by which he acquires, retains, and applies knowledge. The laws of mind can be ascertained, as well as the laws of matter, not of course by the same kind of experiments, but what is just as deserving of that title, viz., by originating mental processes, either in our minds or in those of others; or they can be ascertained, as some writers say, by observation. A knowledge of the laws which govern matter or the material word is said to be power, but some distinguished writers have denied that knowledge is power in regard to an acquaintance with the laws of mind. But this is a narrow and altogether mistaken view of the matter. That knowledge of mind is power, history, biography, and the every-day occurrences of life alike determine. How many individuals that have made the past illustrious, whose names are "familiar in our mouths as household words," were mental philosophers? Almost every one of them. How many poor unknown sons of toil, by the elastic bound of genius, guided by a knowledge of mind, have raised themselves to fame and fortune, have swayed the empire of science, or directed the destinies of men? Let the history of the past witness! What is it that has given the Jesuits such unbounded influence over the fortunes of nations and the councils of kings? Is it their wealth, their numbers, or their force of arms? No, it is their knowledge of the human heart and mind. It is a mental and not a physical weapon which they wield—hence their power. Were they not trained to an intimate knowledge of the laws of mind, taught how to attack and storm the citadel of truth, how to direct the thoughts and mould the passions of men to their purposes, and were they not made masters of themselves, strong in purpose and resolve, by a training agreeable to the laws of mind, their mission to the world would be in vain, their influence over kings and states would crumble into nought; their institutions, their power, their very name would disappear from the earth!

What has enabled the present Napoleon to rise through the various vicissitudes of his life, through exile and the prison, through poverty, revolution, and the senate, to the imperial throne of France? What but his consummate tact, his intimate knowledge of the human mind, or at least with the French portion of it. What enabled the celebrated Abyssinian traveller, Bruce, to achieve the glorious discovery of the Nile's mystic source—a discovery, which had baffled the efforts of kings and conquerors, at the head of vast armies, to effect, and which the enterprise of men for three thousand years could not accomplish; but which he, a stranger, and alone, effected. Was it not the mighty and secret power which he wielded over the minds of

the barbarians, making their ignorance, their passions, their prejudices, and their wills subservient to his purpose. His success will remain an almost unrivalled instance of the power of genius and personal intrepidity, guided by a knowledge of mind. It will remain a lasting triumph of the immeasurable superiority of moral over physical power—of mind over matter.

Instead, therefore, of knowledge of mind not being power, as some writers have asserted, it may safely be affirmed, that, if the phrase "knowledge is power" be applicable to any species of human knowledge, it is pre-eminently so to that which relates to an acquaintance with the laws of mind.

The extent and accuracy of an individual's information concerning external objects, his ability for acquiring a knowledge of his profession, and his capacity for properly directing the powers and faculties of his mind in any intellectual pursuit, will depend, in a great measure, on his knowledge of mind. Dr. Brown justly observes, that all science is in the mind. Science is just the comparison of phenomena, and the discovery of the order of their succession. It is the mind which compares, classifies, judges, reasons; and these comparisons, classifications, and reasonings, which are purely mental phenomena, constitute science. Without mind, science could not exist. The objects of science might exist without mind; the flowers might bloom, and the stars sparkle in the heavens, though there were no science of botany or astronomy to record their wonders.

It is impossible to make any satisfactory progress in the study of nature without some knowledge of mental philosophy. Although men may become well acquainted with the physical sciences, without paying much attention to the science of mind, yet they must always conduct their investigations according to the laws of mind, otherwise they will fail in arriving at satisfactory conclusions. The history of physical science proves this. Why was this branch of knowledge so barren of progress and improvement previous to the time of the illustrious Bacon? Because its cultivators—and they were both numerous, gifted, and energetic—did not pursue a method agreeable to the laws of mind. Bacon discovered a true mode of physical investigation. Hence the success which has marked the progress of the physical sciences since the discovery and application of the inductive method of philosophizing. A cultivated and well-ordered mind is of paramount importance to every man, but how shall he obtain such a desideratum without a knowledge of its laws? If a knowledge of the laws of nature be absolutely necessary before they can be safely and beneficially applied to practical purposes, it is surely as necessary that an individual should be acquainted with the laws which

preside over his mental powers and moral emotions, before he can either rightly direct or properly cultivate them, so as to bring every faculty into the situation best calculated to favour its free and full expansion, and to guard against every circumstance that has a tendency to retard or prevent the complete and uniform development of the whole mind.

He who has paid little or no attention to the study of mind, and who has made no successful endeavours to analyse his intellectual powers and moral feelings, and is almost entirely ignorant of their springs and modes of action, is not very likely to have them in such a well-ordered condition as to favour his possessing a well-stored, a well-cultivated, and a well-regulated mind. Mental science ought to form an important part of the education of every man, that he may be better qualified to undertake the proper training of his intellectual faculties, and be more able to regulate and control the feelings, emotions, and desires of his mind; so that there may be a greater likelihood of his possessing the all-important advantage just alluded to, and of his attaining to the highest intellectual and moral elevation of which he is capable.

A knowledge of mind is necessary to the successful discharge of the duties and responsibilities of life. How shall parents, teachers, and guardians properly cultivate and discipline the minds and hearts of the children committed to their care, without a knowledge of mind? Without this, they may be crushing the opening mind, dwarfing the intellects of the youths, sowing the seeds of those vulture passions, or laying the foundations of intellectual and moral habits, which may ruin their happiness, and blast their prospects and usefulness in the world, and all the time be wholly unconscious of the dire mischief they are doing; nay, perhaps, be flattering themselves that they are discharging their important trust in the most praiseworthy and effective manner. Sad mistake! They who have best cultivated their own mental and moral powers, who have most closely analysed their own thoughts, emotions, and desires, and who have carefully studied the human mind, are the best qualified to undertake the charge and tuition of youth, to cultivate their intellectual and moral powers, to "pour the fresh instruction o'er the mind, and plant the generous purpose in the glowing breast." They are also best fitted to discharge other and higher duties of life.

Again, without a knowledge of mind, an individual is cut off from the enjoyment of many intellectual and refined pleasures. The higher order of poetry is placed beyond his reach. He merely knows, or attends to, the more common or every-day succession of his thoughts, and, consequently, can only appreciate the poetry which relates to these. He

may therefore admire the simple song or the heart-stirring strains of the lyric, but he cannot appreciate or understand the sublime and lofty conceptions of Shakespeare. He may even consider the towering sublimity of *Lear* and the metaphysical subtilties of *Hamlet* overdrawn, unnatural, or meaningless. But they are as true to nature as the sentiment of the finest ballad. These characters have been drawn by the master-hand of genius, a genius which could fathom the depths and unravel the mysteries of the human heart and mind. The individual ignorant of the laws and constitution of the mind, is in the same predicament with regard to his ability to appreciate the truthfulness and power of these and other splendid creations of the great dramatist, as he would be of a painting, faithfully portraying a magnificent scene of classic Italy, had he never heard nor read of its sky, "so deeply, darkly, beautifully blue," nor of the splendour of its scenery, and knowing nature only as she appears in the cold and less genial north. Were a landscape, representing one of the finest Italian scenes by the glowing pencil of a Claude placed before him, he might probably admire its beautiful tints, its admirable light and shade, but he would conclude that it was overdrawn, not true to nature, the mere creation of the artist's exuberant fancy. It would be a correct representation of nature for all that; but depicting a part of nature which the individual did know, he could not therefore appreciate its beauty and correctness. So it is with the higher creations of Shakespeare and other great poets. The characters which they have drawn are true to nature, but they relate to regions and states of mind of which the individual is either ignorant, or unable to reach,—hence his inability to appreciate their beauty and truthfulness. To understand and value Shakespeare and kindred spirits, it is absolutely necessary to be thoroughly acquainted with the laws of mind, with the workings of the human heart, with the play of the passions, and with all the internal and complicated machinery of human thought and action.

The same holds good with regard to the higher order of painting. Without a knowledge of mind, an individual might admire and appreciate paintings, representing the ordinary thoughts and common occurrences of life, but the divine creations of the great masters would be to him little better than pieces of merely coloured canvas. The paintings of a great master, like the works of a great poet, may, however, affect a man without his understanding them, or knowing the cause of their power over him; it is because they are natural. He is affected by their sight, disturbed by "the joy of elevated thought," by the stirring of his deeper nature excited by the secret influence of the spirit of true genius. But were these masterpieces of the great artists not founded on nature, were they not constructed agreeably to the laws

of mind as well as to the principles of art, the charm which they possess over the hearts of men would be dissolved ; they would no longer be the shrines at which the poetic spirit of man delights to worship, nor possess the key to unlock the spirit of genius, nor kindle enthusiasm in the minds of our youthful artists, be to them incentives, guides, and finger-posts to fame and immortality. Knowledge of mind is not only necessary to understand the works of the great masters, but also to make any satisfactory progress in the higher walks of painting. The same remark applies, with all its force, to sculpture, oratory, and other arts.

Mental science greatly aids the cause of religion, by enabling the Christian to form clearer and more rational views of such difficult doctrines as free will, election, and other questions which divide the Christian world. Were mental science more cultivated, there would not be so many divisions among Christians with respect to these doctrines. Ignorance is the chief cause of the diversity of opinions held by men on many of the more difficult doctrines of religion. Many religious doctrines cannot be properly, if at all, understood by persons unaccustomed to psychological investigations. They may receive them as articles of a creed, but they cannot apprehend them by their understandings.

Mental science further aids the cause of religion, by enabling the believer to form a more rational and sublime conception of the personality and universality of the Deity. These are the highest and most overpowering subjects that can engage the attention of the human mind, and the most difficult to understand. Mental science, guided by the spirit of true piety, will enable the inquirer to approach them with a more rational hope of succeeding in forming an exalted idea of their nature and co-existence—an idea alike removed from pantheism on the one hand and a degraded personality on the other.

It has been asserted by some writers that mental science does not aid the religious spirit ; but this is surely a mistaken idea. If piety, reverence, and love to God are deepened and exalted, as most assuredly they are by the study of His works, where, in all the wonders of creation is to be found such evidence of His wisdom and skill as is exhibited in the mind of man—the subject of the science? Were a spectator placed on some commanding elevation in the heavens, “far beyond the universe of stars,” and able to survey the vast magnificence of the worlds and systems that circle in the infinity of space, amid all that glorious assemblage of material beauty and magnificence, and the innumerable host of worlds which would be revealed to his astonished gaze, he would find no object so wonderful and glorious as the human mind ! When the contemplation of the stars, of the green fields, of the flowers, of the quiet lake and the ever-rolling ocean, deepens the religious

feelings of man,—when the study of Nature raises man to the study of Nature's God, surely the study of the human mind, that which is superior to all nature, which is the masterpiece of creation, and an emanation from the Divine mind itself, is calculated to exalt the religious feelings, to give a deeper tinge to the piety, and a warmer glow to the love of the believer, and to raise him to a more sincere and humble adoration of the mighty majesty on high! Knowledge of mind, then, is the foundation of all improvement, the very basis of our intellectual and moral advancement; is an essential towards the possession of a well-cultivated and a well-regulated mind; is a chief cause of the great diversity of mental attainments observed among men of similar original intellectual endowments; and is the source of that tact, that practical knowledge of mankind, which is so indispensably necessary to success in the world. Knowledge of mind is also the means by which a man is raised still higher in the scale of intellect and morality, by which he is advanced to a larger participation in the higher and more exalted pleasures of life, and by which he is better fitted to discharge the duties and responsibilities of his station here, and prepared for a nobler and higher state of existence hereafter.

The preceding remarks chiefly refer to the advantages likely to arise to an individual through his knowledge of mind or mental science. We shall, however, conclude this part of the paper by taking a cursory view of the general influence of mental science—using this term in its widest sense—that is, comprehending both intellectual and moral philosophy; in short, all that relates to mind. First, look at the influence of mental science in every age! In ancient times, the philosopher was also the legislator, as Solon, Lycurgus, Thales, Socrates; and from the earliest periods to the present time, mental science or philosophy has influenced alike science, literature, legislation, and religion; nay, they have been grounded, so to speak, upon philosophy. The progress of each of them has been retarded or quickened, made beneficial or the reverse, according to the varying nature of the philosophy of the age. That this is no idle speculation will be seen by referring shortly to the history of the past. First, with regard to physical science. Allusion has been made already to the slow progress of this science during the many centuries that preceded the appearance of Lord Bacon. The peripatetic or Aristotelian philosophy, which held the sway in the schools during these ages, so cramped the energies and mind of man, that the efforts made by him to investigate nature failed, or produced worthless results. Bacon introduced the inductive method—a method more rational and better adapted to extend the sphere of human knowledge in regard to external nature. The deductive method has also been applied with great success to the investigation of natural phenomena.

Both these methods are the results of philosophy ; they are founded on laws agreeable to the human mind. But philosophy not only influences the method of physical investigation, but also determines the object of research into the field of nature. The natural philosopher whose mind is imbued with a sensational philosophy, that is, a philosophy which declares that all mental states are the result of sensation, cultivates physical science with quite a different object in view from the philosopher who is influenced by an idealistic philosophy—that is, a philosophy based on a notion of self, with its native and exhaustless energies. To the former, nature is merely what it appears to the eye ; he generalizes natural objects in their external relations only. The latter, also, accumulates facts relative to external objects, but he looks into nature to discover her hidden secrets—the forces which are everywhere in continual operation. “Nature,” as it has been beautifully observed by Morrell, in his ‘History of Modern Philosophy,’ “is to the idealistic philosopher a glorious mystery, necessarily prompting us to the conception of spiritual agencies, which agencies are, in fact, only the ‘indications of the Creator,’ the varied forms in which a divine and spiritual power is diffusing itself throughout its own immense creation.”

The influence of philosophy over physical science is still visible in the works of modern authors, and it will continue to exercise an influence over scientific research to the end of time. To those not familiar with the paramount importance of philosophy or mental science, we would recommend the perusal of Morrell’s “History of Modern Philosophy ;” the writings of Carlyle, Whewell, Humboldt, Herschel, &c. Look again at the influence of mental philosophy on literature. It is enough to allude merely to the historical writings of Hume, Gibbon, Macaulay, and Alison, to see the power which the philosophic tendencies of historical authors has over their respective productions. The poetry of Byron and Wordsworth affords a striking example of the effect of philosophy in moulding the thoughts and sentiments of poets, and leading them to an elevated or debased conception of man and nature. Byron has given some splendid descriptions of natural scenery—descriptions which, for power, beauty, and distinctness, have never been surpassed, if equalled, by any other poet, either ancient or modern. But graphic and minute as those poetical paintings are, they depict merely the outward and visible forms of nature. Wordsworth has also portrayed the outward forms of natural objects with great beauty and effect, but he has likewise endeavoured to discover in them the “good, the beautiful, and the true.” To the former, nature appeared only a vast panorama of outward forms and beauty : to the latter, a world pregnant with living power and moral significance. To the one, nature is only a magnificent assemblage of

visible but isolated objects: to the other, a vast collection of varied forms, which link the spirit of man to the Spirit of the universe. Byron observed nature only as a poet: Wordsworth as a poet and a true philosopher. The latter has said, in his beautiful lines on Tintern Abbey,—

“For I have learned to look on nature, not as in the
Hour of thoughtless youth—but hearing oftentimes
The still, sad music of humanity,
Nor harsh, nor grating, though of ample power
To chasten and subdue. And I have felt a presence
That disturbs me with the joy of elevated thought,
A sense sublime of something far more deeply interfused,
Whose dwelling is the light of setting suns,
And the round ocean, and the living air,
And the blue sky, and in the mind of man,
A motion and a spirit that impels
All thinking things, all objects of all thoughts,
And rolls through all things.”

This is a key to his whole writings. Byron's popularity is already on the wane; and after ages will regret that a false and gross sensational philosophy and other causes, so perverted his mind and corrupted his heart as to prevent him leaving to posterity one piece really worthy of the greatness of his powers and the splendour of his genius. The poetry of Wordsworth is addressed to the deeper and purer feelings of man; and it will be read and admired so long as the human mind is affected by the beauties of nature, by purity of thought, and elevated sentiment. Wordsworth's mind, unlike Byron's, was imbued with an idealistic philosophy—hence the difference of their respective writings.

Let us here consider shortly the influence of mental philosophy on legislation and the condition of nations. To go no further back than the latter part of last century. We would ask, what chiefly gave rise to the horrible first French Revolution? It was most assuredly the promulgation of pernicious philosophical principles, until they spread through all ranks and classes of men, and corrupted the public mind of France. It was this, chiefly, which overthrew religion, uprooted virtue, and roused the fiendish passions that trampled on the throne, degraded liberty, outraged all order and decency, and made France red with the blood of her citizens. This tragic historical drama alone shows the influence of philosophy, and the absolute necessity that exists, at all times, for the cultivation and dissemination of a sound, healthy, and enlightened philosophy of mind among the people of every nation.

Whatever kind of philosophy exists in the minds of our Lockes, Adam Smiths, and Bentham's, colours or determines their principles of social or political economy. The principles, political or philosophical, which are held by these philosophers, affect the public mind through books, the press, lectures, speeches. They affect the minds of the lead-

ing statesmen, who work them into a practical shape, and discuss and agitate them, until the public mind of a nation is affected by their truth or necessity, and legislative enactments are the result.

Philosophy also exerts a powerful sway over religion, not only over the religion of an individual, as in the case of Swedenborg, Priestley, and others, but over that of the Church. It has affected the religion of every Church in every age, modifying its opinions, its spirit, and its practices. The history of philosophy, as well as ecclesiastical and civil history, proves this. To take one example. It is the influence of a peculiar and somewhat mystical philosophy which is held by a few minds of the present day, that has produced the movement that is now going on in the Church of England. Whatever kind of philosophy is taught in the Universities, and imbibed by the theological and other students in attendance there, it will modify or give a colour to their religious opinions. Hence the necessity for a sound system of philosophy being taught in all Universities—without which, creeds and articles of religious belief will be of little avail in promoting sound and scriptural views of religion among those who are destined to become the teachers of others.

Seeing, then, the influence of philosophy over the opinions and actions of man, over science, legislation, literature, and religion, and seeing that in one form or another it has always held sway in the world, and that it will continue to do so till the end of time, exercising a useful or a baneful sway according to its nature, we must conclude that mental philosophy ought to form not only an important part of the education of man, but should, also, claim his attentive consideration during every period of his active existence. It ought to be his constant aim to attain to the knowledge of a sound, pure, and elevated philosophy of mind. Further, an individual may have some excuse for his being ignorant of many sciences, but can have none for his ignorance of mind. He may not be able to purchase a telescope to sweep the heavens, and aid his study of astronomy; and he may remain almost ignorant of the unseen world of life around him, from not being in possession of the microscope to reveal its wonders; and of chemistry, from his want of proper instruction and suitable apparatus. But he has the means within himself to become even a master in mental science. Unaided and alone, he may study mental phenomena as they are manifested within himself, or as they are exhibited in those around him. In addition to the careful study of the standard works on mental philosophy, the student should study mind practically as well as theoretically, and not confine his attention to books bearing expressly upon the subject. He ought to study the human mind as it is reflected on the page of history,—here, as in the world, he may obtain a practical

knowledge of mankind, as well as become acquainted with the march of the human mind upwards through successive ages and civilizations to the present time, and also learn the various circumstances which influenced or retarded its progress and development. And he should study the mind as it is depicted by the powerful genius of Shakespeare, who has withdrawn the veil from the human heart, laid bare, with a master's hand, its hidden mysteries; explained the "subtleties of thought and the laws of passion"; who has presented us with a complete analysis of mind, with a perfect anatomy of the passions, emotions, and desires of man. And whether delineating the subtleties of love, the turbulence of passion, the rage of madness, or the chatterings of imbecility, or depicting any other phase of mind or character, he is equally natural, faithful, and profound. He is a metaphysician worthy of the closest study. The mind should be studied also as it is exhibited under the mild and genial sway of Christianity, and as it struggles for utterance through the gloomy atmosphere of infidelity, and as it is developed under the sway of the different religions and the different forms of political government. It should be studied among the rich and poor, the learned and unlearned, in its development, maturity, and decay; in health and in disease, at the festive board and at the hour of death. But, above all, the psychological student should study his own mind. It is here that his progress in mental science will be most satisfactory. For by attending closely to his own thoughts, emotions, and desires, and observing their springs and modes of action, by observing, in short, all the phenomena of mind as exhibited in himself, he may not only obtain a clear and comprehensive knowledge of the powers and susceptibilities of the mind, and of the laws which regulate their action, he may not only gain a knowledge of mental science, but, what is of more consequence, gain a knowledge of himself—a knowledge of his powers and capacities, his motives and desires, his virtues and defects,—a knowledge which will enable him to improve his intellectual powers, cultivate the affections of the heart, and give him the mastery of his will, make him firm in purpose and resolve, and fit him for the proper discharge of the duties and responsibilities of life.

DOES ANY ANALOGY EXIST BETWEEN INSANITY AND DEMONIAL POSSESSION?

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WE have often heard the opinion, indeed it is asserted with a good deal of confidence, by some modern believers in the mystery of table-turning, that all insane persons are under the possession of devils. There are others, on the contrary, who are no less positive in their conviction that the influence of Satan in the matter, in ancient as well as modern times, is altogether a myth and an exploded folly. These latter hold that the demoniacs were merely insane. Both these opinions, though so utterly at variance with each other, start from the same point of some supposed and seeming analogy between insanity and possession. Whatever may be thought of the reasonableness of either of the above *conclusions* that have been drawn from it, it is certainly worth while to consider what grounds there are for supposing that such analogy exists. Believing this subject to be one of considerable interest, we propose, without further preface or apology, to enter upon its consideration, in a spirit alike removed, we trust, from an unreasoning bigotry on the one hand, and from the irreverence of a too bold rationalism on the other.

At the very threshold of this inquiry, it is of great importance that we should endeavour to ascertain whether the Evangelists make any special distinction between lunatics and demoniacs. We believe it to be universally acknowledged that no *example* is given of the cure of insanity, as called by that or any analogous name, to distinguish it from possession in any of the Gospels. But the twenty-fourth verse of the fourth chapter of St. Matthew is triumphantly appealed to by many writers, as proving that such cures were performed, and that no analogy between the two maladies can possibly be shown to exist. And certainly this passage forms a very plausible, if not unanswerable argument in favour of that opinion. We will quote the Evangelist's words:—"There were brought to Christ, both those which were possessed with devils, and those which were lunatic, καὶ δαιμονιζομένους καὶ σεληνιαζομένους, and he healed them." Valpy's note on this passage is most positive. He says,—“The persons possessed with devils are here *expressly distinguished* from lunatics, and could not be exactly the same.” Many writers, both before and since the appearance of Dr. Valpy's Greek Testament, have maintained the same opinion; indeed, it has almost come to be regarded as treason or heresy to entertain a doubt about it. Dr. Adam Clarke expresses the utmost contempt and pity for those who are irrational enough, or infidel enough, to believe that the demoniacs were merely insane.

It is clear that the words already quoted from St. Matthew do, in a certain sense, distinguish the demoniacs and lunatics from each other ; and if this distinction could be shown to be of as positive a nature as it has been supposed to be, we readily admit that the question in the mind of every devout believer in revelation would be set at rest. But we hope to be able to prove that the distinction made by the Evangelist is not of this nature, and does not militate at all against the opinion that the two diseases are analogous. Now it is worthy of remark, that the word translated “lunatic,” occurs in only two places in the New Testament. Both these passages are in the same gospel ; and it may, therefore, be assumed that the same meaning is attached to the word in each case. But in the latter of the two passages, the Evangelist uses the word lunatic and demoniac interchangeably. To the same man he applies both terms ; or at least, he says of him, when our Lord had healed him, ἐξῆλθεν ἀπ’ αὐτοῦ τὸ δαιμόνιον, “the demon departed from him.” St. Luke also, and St. Mark, in whose gospels this miracle is recorded, both speak of him as a demoniac. It is therefore clear that in *one* sense the two classes were not distinct at all. Both were possessed.

We will now proceed to inquire, therefore, what meaning this word *σεληνιαζόμενος*, or lunatic, has ; and since the passage quoted first from St. Matthew distinguished it from demoniac, in what respect it is that the two differ. We refer our readers to the seventeenth chapter of St. Matthew, as showing in what sense that Evangelist understood and used the word. A “lunatic” is brought to our Lord ; the symptoms of his disease, and the circumstances attending his cure, are briefly recounted. What are these symptoms ? The child’s father describes them : he says this lunatic son was “deaf and dumb ; he fell often into the fire and into the water.” If we turn to the parallel place in St. Mark, we find him still further described as being “torn”—or rather as the word *ρήσσει* signifies, and is translated in the margin—“dashed”—thrown upon the ground ; and “he foameth, and gnasheth with his teeth, and pineth away.” St. Luke adds yet another word to the description of this case :—“When the spirit taketh him, he crieth out, and it throws him into convulsions,” *σπαρασσει αὐτόν*. It is scarcely possible to come to any other conclusion than that the “lunatic” described above in the gospels was simply epileptic. The poet Lucretius describes one labouring under this malady in terms exactly similar :—

“spumas agit, ingemit. et tremit artus
Desipit, extentat nervos, torquetur.”

Numerous examples answering to this description of “the lunatic,” might be found in the epileptic wards of every asylum. We think it clear, therefore, that the Evangelist did not affix to the word *σεληνια-*

ζόμενος by any means the wide signification now attached to our corresponding word "lunatic." Nor did he, in applying to it the meaning of epileptic, use it in an arbitrary and unauthorized sense. Galen so uses it. And we find, on reference to the learned and most valuable lexicon of Peter Mintert, that this is the only meaning he attaches to it. His words are "*σεληνιαζόμενοι, lunatici sunt, qui epilepsiā, seu morbo comitali laborant.*"*

We have shown before that in *one* sense St. Matthew does not distinguish demoniacs from lunatics at all; and we think the above remarks prove that when he does represent them as he does in chapter four, verse twenty-four, as two distinct classes, the difference between them amounts to nothing more than the difference between our maniacs who do *not* suffer from epilepsy, and those who do.

We think, then, that it is proved beyond a doubt, that unless demoniacal possessions and insanity be considered analogous, no single instance of the cure of what we should now call an insane person is recorded in any of the gospels. Not even in the most general manner is any such cure alluded to. And this not only paves the way for a further investigation into the meaning of the disputed word, but also, as we hope to show, aids very materially in determining what that meaning is. For if, as has been often asserted, and asserted too in terms of no measured contempt for the intellect or the principles of those who hold the contrary, the demoniac laboured under an affliction totally different from any mere mal-organization or lesion of the brain, how, then, is the proved omission in that case of any miraculous cure of insanity from all the gospel histories to be explained? Such an omission can only be accounted for on the supposition, either that no insane persons existed at the time; or, that though they did exist, none were brought for cure; or, that they were brought, but our Lord did not heal them; or, that he healed them, but the fact was not deemed important enough for special record or for general reference.

A moment's consideration of the subject will suffice to show that any one of these suppositions is too unreasonable to be entertained.

It is impossible to believe that the Jews alone, of all the nations on earth, were exempt from this fearful and mysterious malady. In a condition of society constituted as theirs then was, there was every

* That the word *σεληνιαζόμενος*, or lunatic, should be limited in its application to epileptics only, and not extended to all the insane, is not to be wondered at. It was generally believed by the ancients, and the belief still lingers in some quarters, that the moon has a decided and especial influence upon epilepsy: and that belief seems to be incorporated in the word *σεληνιαζόμενος*.

Dr. Guislain says that though "mania recurs by periodical returns, there is no *regularity* in these manifestations. It is in cases of epilepsy that the greatest regularity is observed."

It was therefore natural that a word which expresses that belief in lunar influence should be applied, as we see it was applied, to epileptics.

influence at work upon them calculated to excite and produce insanity.

The glory of their nation had departed. They were crushed beneath the yoke of the Roman power—a power regarded by them with mingled feelings of fear and hatred, of horror and aversion. Universal attention was eagerly strained to catch some signs of coming deliverance—signs of the advent of that period predicted by their prophets, and believed to be at hand, in which, as they hoped, they were to rise again to more than their ancient greatness, and their enemies and conquerors were to be for ever broken and destroyed, “beat small as the dust” beneath their feet, and swept away before the whirlwind of their power. Yet no signs of such deliverance could be seen. Proofs of their degradation and of a miserable thralldom met them in all directions.

The Roman tax-gatherer came with his hated exactions, and if they dared to resist him, the majesty of the Roman law was avenged by the magistrate or the soldier. Such visions as these were the things that met their gaze, whilst they strained their eyes looking for signals of returning *glory*. It would almost seem to them as if the words of their prophets had been spoken in vain. Their elated hopes of dominion would appear but as the dreams of delirium. When they looked for deliverance, some Roman pageant, like a mocking fiend, laughed at their misery, and poured scorn upon them. When they conspired and struggled to be free, their conspiracies were detected and crushed, and they sunk only to a deeper slavery. They fell down exhausted by these convulsive efforts; their chains were fastened more firmly around them. It is impossible but that multitudes should be driven to madness by this degradation and misery. But in addition to this, the deepest corruption spread and festered in the very heart of the people. There was unbridled licence of lust amongst them; hatred one of another, divisions, jealousies, cruelty, sensuality. Could the national conscience sleep amidst all this? It is impossible. The remembrance of what they had been, when God’s laws had been more regarded amongst them; the knowledge of what they were then, when all law, human and divine, was hated and trampled on, could not fail, however their moral sense might be deadened, to rouse them to remorse, and to haunt them with all ghastly apparitions and fears for the future. Palpable and monstrous distortions of mind *must* have arisen out of such a state as theirs. Having lost their faith in God, they had come to believe in lying vanities. They bent their attention to forbidden science to see, it may be, whether they could not gather hope from that. They believed in, and consulted demons. It is from facts like these that Dr. Lightfoot accounts for the demoniacs that there were amongst them. But these are the things which always overthrow the balance of the mind, and lay it open to the incursions of disease.

These are the causes which invariably drive men to madness, and sink them and their offspring to a helpless idiocy, and to incurable mania. The supposition, then, that there were no insane persons existing in the time when our Lord appeared in Judea is most unreasonable.

And it is equally unreasonable to suppose that there were instances of mania amongst them, but none were brought to Christ for cure. They brought their sick, the poor paralytic, the lame, the blind, the deaf, the dumb; they even besought Him to come to the chamber of death, and did not doubt that if He spake the word, disease should be arrested, and the dead should live. Is it possible, then, to conceive that they would leave their maniacs, the victims of a malady the most painful, the most terrible that man can be subject to, the most dangerous also to society, and not bring them also and lay them at the feet of Jesus, beseeching Him to heal them? We conclude, therefore, that they did bring to Him the insane; and the supposition that they were brought to Him in vain, is too irreverent to be entertained. He healed disease; He opened blind eyes, and unstopped deaf ears; He loosed the tongue of the dumb; the very grave gave back its dead at the bidding of His word. Who, then, dare doubt His power to dispel the delusions of a diseased understanding, and to restore sanity? or who, that has read His life, dare doubt His willingness to exercise that power? It is impossible to resist the conclusion that He healed the insane, as many as were brought to Him. And this work would be so wonderful, so unheard-of a miracle, so mighty a proof that He was indeed the Restorer of mankind, the Divine Logos, the Light "which lighteneth every man that cometh into the world," that it is impossible that the Evangelists, who delight to set forth His greatness, should all of them have omitted to record a miracle like this. But, unless the word demoniac have this meaning of insane, they *have* omitted it; there is not even an allusion to it. This fact gives to our mind no small degree of probability to the opinion, that the two words mean the same thing;—a probability which is further heightened by this: that all we read of the character and acts of these demoniacs corresponds in a most marked degree with all we know and witness of the character and acts of the insane.

In adducing our proof of this position, we shall confine ourselves entirely to the meaning, and as nearly as possible to the very words, of the Evangelists' descriptions of persons possessed.

They were "fierce," ungovernable, violent, possessed of unnatural strength. They were "bound with fetters and chains," which "they plucked asunder, and broke in pieces." "No man could tame them." They dwelt naked (for "they tore their clothes" from them) upon the mountains and "among the tombs," and "no man durst pass by the way." One is spoken of as crying (*κράζων*), uttering screams, and tearing himself with stones. We add nothing to this description except to

observe, that the language which they are represented as addressing to our Lord is characterised by the same irrational wildness as their acts. "They ran to Jesus, and *cried with a loud voice*, and said, What have I to do with thee, Jesus, thou Son of the Most High God? I adjure thee by God, that thou torment me not." We venture to say that if this description, selected in the above words from one or other of the gospels, were to be met with in any other book, any number of persons who should read it, or hear it read, would, without hesitation, unani- mously pronounce the men whom it represents to us to be maniacs. Be it remembered that there were no institutions then for the mitiga- tion of their disorder. They were probably treated with a mixture of fear and violence, which would naturally increase their fury. It was natural, therefore, that they should fly to uninhabited places, and that men should not dare to go near them. The case would be the same with our insane, if the treatment were the same. It has been so, within every man's memory, before that modern and milder treatment came into operation; that system of moral instead of mechanical restraint, which is one of the wonders and glories of an enlightened medical science. Even under this milder and wiser system of ruling them, their character and language present many points of strong similarity with the above descriptions. They often burst out into acts of the wildest violence; they often believe and fear that those who approach them as friends are come "to torment them."

We are bound, however, to admit, notwithstanding the great, we might almost say *perfect*, similarity there is between the demoniacs and the insane, there are still very considerable difficulties in the way of that interpretation which would represent them as one and the same. These difficulties, which we hope to remove in the course of this discussion, arise from some peculiarities in the Evangelists' lan- guage, not easy to reconcile with modern scientific theories of insanity. The demons, that are declared to "possess them," are described as uttering adjurations to our Lord, and exerting violent acts of power over their victims. Our Lord in return is spoken of as addressing His words to them, giving His command to them to depart, or His per- mission to enter a herd of swine. Now even allowing that you are not to expect the same kind of description from the Evangelists that would be presented to you in a medical treatise—admitting that their purpose was entirely different—still there is a something in the language which speaks of men as "possessed by devils," which seems utterly at variance with all our ideas of mere insanity. This difficulty is some- times attempted to be got rid of in a very summary manner, by the answer that our Lord and His followers described the malady in such terms out of regard to the prejudices of the Jews. We cannot think

that this is an adequate or even a fair reply to the difficulty. For it implies that Christ and His disciples deliberately countenanced an opinion which they knew to be false; that they fostered superstition though their professed object was to proclaim only truth.

We may be quite sure that they would never sanction any falsehood—they would never countenance any superstition. We may be quite sure, also, that when they spoke of the miserable victims of madness, as *δαμονιζόμενοι*, they had some real and deep meaning in it. And we believe that only by taking this view, and meeting the difficulty which the words present fairly and honestly, shall we be able to find any answer to it. No argument was ever yet really strengthened, but rather weakened, by disingenuousness and evasions.

There lay a very awful truth under their words—a truth which, in our opinion, is scarcely held in view at all, but to a great extent obscured and overlooked, in the meaning so often attached to their words, of a real, visible, palpable demon being within the men. What the Evangelists believed, and meant their readers to believe, was this, that all evil, especially such evil as affected the spirits and minds of men, was the work of the devil; and they represent Christ as the Deliverer from this evil. Now if they had represented Him as healing men's bodies only, whilst He passed over the diseases of the mind, they would scarcely have given a full idea of what the Deliverer was—the Destroyer of the devil's power, the Restorer of man's true humanity. To attribute then, as they do, the malady of insane men to the "possession" and power of Satan, is only speaking in accordance with the view given above—in accordance with the whole spirit and teaching of the Bible—in accordance also with their own expressed teaching with reference to the diseases of the *body*. For, in recording the case of that poor "daughter of Abraham" bound, and bowed together with the spirit of infirmity eighteen years, it is expressly stated, that "she was bound by Satan." He is described in another place as possessing "the power of death," *τὸ κράτος τοῦ θανάτου*. To this it will naturally be answered that though disease and death are represented as the work of the devil, yet we never read of any diseased man as being "*possessed* by the devil." Of course we never do. The language would be absurd and false in such a case. For disease affects only the *body*, the outer shell, and not the real ego of the man. But insanity possesses the mind, the actual personality of the man. Therefore in the one case it is simply said, Satan *hath bound* the body; but in the other, the man is possessed with him. And it would be just as absurd to infer from this language, in the one case, that actual demons dwelt within the man, as it would in the other that diseased men were stricken or bound, or the dead cut off, in every case by an actual

stroke or personal act of the Evil One. What is really meant is this—that disease and death are the effect of that sin which the devil tempted man to commit, and still tempts him to perpetuate; and that insanity also is the result of the same malignant influence, exerted on the mind as well as the body. This, indeed, is all that can be drawn from the Scripture words on the subject. We never read of one single case possessed by *Satan*, the actual, the real *διάβολος*, but by *δαίμονες*, or *δαμόνια*—evil influences proceeding from the Prince of Evil. There is certainly nothing in the word *δαίμων* itself to indicate more than this—nothing to indicate, necessarily, a personal existence. It is used in one case, at least, by the Septuagint translators in no stronger meaning than this, rather indeed a weaker, as the equivalent of the Hebrew *רֵשׁ נִהִילִי* *res nihili*, any vain, perishable thing, particularly idols.

And everything which the Evangelists predicate of these demons is perfectly easy of explanation on the supposition that the *δαίμονες* were not personal existences. It is true they are spoken of as casting their victims into the fire, &c. But every language has forms of expression analogous to this. It is just what we should expect in an Eastern language; that the words and deeds of a man acting under the impulse of insanity should be attributed, not to the man, but to the influence by which he was impelled. Free as our own language is from all tendency of the kind, we have analogies even in *it*. We personify anger; and men's words uttered in passion are overlooked and forgiven, as being not his own words, but those of that furor that possessed him. We say of the follies and inanities uttered under the influence of wine, "It is the wine speaking." The language of the Evangelists means no more than this—a man utters wild words, or does deeds of folly and madness, but the man's mind is not under his own control; an evil influence possesses him, therefore his deeds and words are not attributed to himself, but the evil power, or *δαίμων*, that has rule over him. It is just the very language we should expect to find in the Gospel descriptions of the men; the very language that would appear most natural and proper, more especially when we take into consideration the fact that insane persons often speak and act under an impulse against which their real self rebels, but is too weak to resist. We quote as an authority for this assertion the opinion of Dr. Guislain on the subject, from the analysis of his work which appeared in former numbers of this journal:—"I have known patients who have said to me, 'Something, I know not what, an electric force, perhaps, compels me I must act in opposition to my intentions.' Others say, 'There is in me some one who is not myself—who drives me, and forces me to act.'"

Every one at all conversant with the insane must have seen cases of

this kind; men possessed of a sort of double consciousness; the actual ego of the men feeling itself fettered, or driven onward by some strange impulse, and perfectly conscious of the thralldom, yet not having strength of will to resist it.

The tenour of these observations is to prove that the language employed by the Evangelists in speaking of the demoniacs, though at first sight it presents us with some difficulties, is not, on a fuller consideration, *inconsistent* with the theory that the insane and the demoniacs are one. There is nothing in it to overthrow that theory; so that the arguments which we employ to show the analogy between the character and acts of the insane and of demoniacs remain in their full force, unassailed and unassailable.

We shall proceed now to offer some evidence, that in giving to the word the signification of maniac or insane, we are not imposing upon it an arbitrary meaning of our own. We are not without proof that this is the sense which the Jews and the writers of the Gospels themselves put upon it. We have seen in a former part of this Essay, that the Evangelist St. Matthew employs this, or an equivalent term, as synonymous with the word Lunatic, or Epileptic. Now, if an epileptic person were demoniac, the inference is clear that the writers of the New Testament did not employ the word to signify a supernatural disease. And since their application of it shows that it has also a wider meaning, and that it refers to a class of diseased persons of whom the epileptics are but a small portion, how irresistible the conclusion that that class to whom they applied it were simply the insane. This conclusion is confirmed by the fact that, in St. Matthew's account of the healing of one of these demoniacs, he speaks of the man after his restoration to health, as "sitting at the feet of Jesus, clothed, and in his *right mind*:" σωφροσύνη is the word he employs on this occasion—a word which clearly intimates that, according to this writer, his state of mind was unsound before, but the miracle of healing had given back its sanity again.

The people also affixed this meaning to the term. On more than one occasion we read of them uttering these blasphemous words to our Lord,—“Thou hast a devil:” an expression exactly analogous to the words, “Thou art demoniac.” Now they apply this expression to Him, not because of any supposed wickedness in Him, but because His language appeared to them unintelligible, incoherent raving. He said, they went about to kill him. They thought this the dream of a madman. He told them, by implication, that they were not Abraham's children. They thought it the language of folly and delusion, and again apply the term to Him. He told them, if a man kept His saying, He should not see death. This seemed to them madder than all.

Abraham was dead, and the prophets. It seemed to them the wildest folly; and they replied, "Now *we know* thou hast a devil." On the fourth occasion they clearly explain their meaning,—“He hath a devil *and is mad*,” καὶ μαίνει,—He was under delusion, a wild and mad enthusiast, deceived, and a deceiver.

This καὶ μαίνει of theirs is the very term applied by Festus to St. Paul, when he believed him, as *they* believed Christ, to be speaking the words of a wild delusion.

We see, therefore, that the expression, “Thou art demoniac,” is only a Jewish way of declaring that a man is mad, deluded, wild, insane.

Before we conclude, we must say just one word in reply to a large class of persons, whose scruples we wish to respect, who believe that our view on this subject goes far to deprive our Saviour’s most wonderful works of all that made them miraculous. We scarcely flatter ourselves that any argument of ours will carry conviction to their mind. We do not know what views *they* entertain of insanity. It may seem to them a very slight, unnoticeable miracle to heal it with a single word, as our Lord did. But for ourselves we must confess that to restore the demented to vigour of thought, to banish all mental delusions, to heal raving maniacs and hopeless idiots in an instant and with one single word of power, seems to us one of the grandest, noblest, most Godlike miracles we can possibly conceive of. It is a miracle which, to our thinking, has a much deeper meaning for *us*, and all generations of men—a meaning that appeals much more to our sympathies than that which represents Christ as ejecting from men actual, palpable devils. For in the one case, wonderful though the work is, He is but healing a disease which never, that we know of, appeared before, and never may appear again. Whilst in the other, He cures a malady which all men concur in believing to be the most fearful that can afflict humanity; a malady that has existed in every age of the world; a malady that may befall any one of us, since, to use the language of an eloquent and learned writer on insanity, “neither the genius of a Southey or a Tasso, nor the wit and vigour of a Swift, nor the tenderness of a Cowley, nor the piety and talent of a Cruden or Hall, can exempt men from its influence.” In healing this disease, Christ appears as the Lord of mind and matter, the Restorer of our true and real humanity. He declares to us, by this miracle, that as it is the work of the Evil One to overthrow the balance of the mind and cover it with darkness; so it is *His* work to restore and give light. And all they whose lives and talents are devoted to the study of this painful disease, that they may mitigate the evils of it and remove them, have thus, in their noble work of mercy, the encouragement of His Divine example.

AN ANALYSIS OF GUISLAIN'S WORK ON INSANITY.

TWELFTH LECTURE.

(Continued from No. XXVII., page 443.)

On delirium or disorder of the ideas.—I have shown you the moral sensibility painfully affected, the passions diseased, and the pathological perturbations of the will. Now let us consider morbid ideas, delirium. Delirium, which I shall define to be a marked aberration of reason, is an error in the conceptions, a disorder in the ideas, which the patient can neither resist, nor put an end to; it is always a chronic condition in which he regards as realities the phantoms of his imagination.

The delirium may be *general*, or partial when it relates to certain isolated ideas. There are two species of delirium—one *essential*, pure, constituting a disorder absolutely simple; the other *symptomatic*, secondary, tertiary, arising at the same time as other disorders, and disappearing with them. In special delirium, the patients preserve more or less the aspect and bearing of a healthy man. The memory remains intact; they count, calculate; they distinguish right and wrong; they judge of events; up to a certain point they can conduct themselves suitably in society, sometimes even carry on their affairs. Most frequently delirious madmen are not conscious of their state; they look upon their dreams as realities. There are states in which reason and the imagination engender errors, and in which the patient feels that he is the sport of an intellectual phantasmagoria. This state is not delirium.

In partial delirium, the sleep may be disturbed; but the nutritive functions are rarely disturbed.

I recognise four distinct categories of erroneous conceptions,—1. An *accusative delirium*.

Many patients thus affected talk of secret means which their pretended enemies use against them. Often these imaginary beings act at a distance; they have electricity, magnetism at their disposal.

A captain, formerly aide-de-camp to Byron, in Greece, now in this establishment, is convinced that enemies in the island of Ipsara work upon his mind by the aid of a machine he does not describe. "Yes, sir, those villains yonder are working the machine . . . you know the machine." If you ask him what machine? he smiles cunningly, as if to say, "You, too, are setting a trap for me."

We have patients profoundly impressed with the belief that the pump-water is poisoned, and that arsenic is put into all the food. They refuse food accordingly. In this case the refusal has a motive; they refuse because they think you want to get rid of them. In folly, on the contrary, this refusal is a caprice of the will; the patient refuses to eat without knowing why.

Others behold spies on every side. The features of these change, they turn pale at the sight of another patient, or of a keeper approaching them; they take them for assassins or traitors. This species constitutes a form of transition which connects delirium with mania; the whole condition announces excitation, exaltation. In simple accusative delirium, the patient is much more calm.

2. The delirium of *inspiration*. I define the condition of those affected with this form by describing them under the term of *erotic monodelirious*, religious, ambitious, and *hypochondriac monodelirious*.

Erotic acts are sometimes accompanied by a marked derangement in the conceptions and ideas. These are false interpretations, pretended marriages, the persuasion of having had children contrary to the fact. This is metromono delirium.

Religious monodelirium takes the forms of theomonodelirium, monodemonodelirium, monodemonolatry, when the patient persuades himself he is in hell, and worships Satan. This vesania, in our days very rare, was common, and sometimes epidemic in the fifteenth and sixteenth centuries.

Religious delirium also includes prophets, men who believe they enjoy a celestial existence, and madmen calling themselves God. You will observe in examining these patients, that you must excite them in the direction of their delirium, in order to bring out their delirious conceptions. They may reason well upon a number of subjects, provided you do not touch upon that of their delirium.

We have also kings, queens, and princes.

There is a class of delirious illusionists whom I will call the metamorphosed. There is a patient who believes himself transported into a dwelling which is not that where he really is. There is another who believes he has grown a foot in the course of the night; all his teeth have fallen out, but he pretends to have got others, much whiter; he has no longer legs, or arms; his legs are glass; he has animals in his stomach; he has no bowels.

Under this order of vesania must be classed the zoanthropists, who imagine themselves changed into beasts.

A fourth group comprises those labouring under hallucinations. I have met with women who cried out for help, imagining that their children were being butchered in the adjoining room. In others the hallucinations are visual. Others fancy they smell foul odours. Less frequently the sense of taste or that of touch is affected.

But these forms are not often simple; several forms are observed together.

Intermissions are less perceptible in delirium than in mania. The duration of this kind of alienation is very long. It may last for years without much affecting the health. Sometimes it ends in dementia; rarely in mania.

THIRTEENTH LECTURE.

OF DEMENTIA, or the obtusion and obliteration of the phrenic acts.

The phenomenology of dementia.—Dementia is the weakening or obliteration, more or less complete, of the moral and intellectual faculties, often accompanied by the diminution or extinction of the motive power.

Five fundamental types compose this kind of vesania:

Pure dementia: the exhaustion, more or less general, of the phrenic faculties.

Stupidity: the partial or total suspension of the intellectual and motor acts.

General paralysis: the progressive paralysis of the moral, intellectual, vocal, and locomotive phenomena.

Imbecility: the imperfect development of the moral and intellectual faculties.

Idiocy: the non-evolution, or defective evolution of the mental faculties, accompanied most frequently by disorder in the locomotive acts; a disease connected with a congenital state.

This division is based upon the phenomenology. Pinel, Esquirol, and many other physicians have adopted a division drawn from the symptoms. They distinguish dementia from idiocy. But it is impossible to see in idiocy, if we look to the morbid form, anything but a variety of dementia.

I admit a dementia pure, false, complete, incomplete, special, general, primary, consecutive, simple, compound.

1. *Pure dementia*: *amentia*, *fatuitas*, *anoia*.

Dementia contrasts strongly with the *vesaniæ* we have hitherto considered. It is an exhaustion, a falling-back of the phrenic powers. The patient hears, sees, and cannot distinguish; he neither understands nor appreciates. Dementia is announced by an expression of subjection, of apathy, of intellectual nullity, by an attitude relaxed and indolent, a want of dignity, a certain incapacity for bodily movements, a slow elocution, inane, childish, or unmeaning answers, a difficulty, an impossibility of forming ideas, a stupid and indifferent bearing.

Dementia is *false* or *real*. There is a condition which often deceives the world. Whenever an insane person has no spontaneity, ceases to recognise and to understand, remembers no longer, he is looked upon as an imbecile. Well! these are not the true elements. In such a man there may be an oppression, and not an extinction of force. This is especially applicable to acute melancholy and acute mania, in which diseases the intelligence seems to be covered with a veil.

This is the acute dementia of some authors.

Dementia may be *complete* or *incomplete*.

In the first case, the mental faculties are dead. Dementia is incomplete when the patient recognises the members of his family, remembers the name of the street he lives in, when his evacuations are not involuntary. The English call this "apathetic insanity." Recovery is not hopeless. I have met with it in men recently married, in drinkers, in epileptics, taking the place of convulsive attacks, and after long sorrows.

Another variety of intellectual decadence has been called *hebetudo psychica*; it consists especially in the weakening of the judgment, of the reason.

There are *special* dementias, and *general*. The patient may experience a considerable impairment in a certain range of his phrenic faculties; he may be in a state of *monodementia*, preserving the remaining faculties intact. Thus he may retain an artistic talent, remain a good painter, a good musician. There is a phrenopathic condition which consists simply in loss of memory.

In another class of *vesaniæ* opposed to those I am speaking of, the patient performs tolerably well certain acts, but he is affected with extreme disorder in his speech. This is *incoherence of ideas*.

Dementia is *primary* or *secondary*. When primary, it is closely linked to the causes from whence it sprang. This is especially the case when the disease is associated with debilitating influences, as the abuse of drinks, spermatorrhœa, advanced age, antecedent sickness, penury. It is also primary when moral causes re-act upon delicate, feeble subjects. During the last three years we have entered an exorbitant number of cases of primary dementia.

Dementia is secondary when it follows upon melancholy, mania, folly, delirium, ecstasy.

Sometimes dementia is a *compound* disease. An elementary dementia, strictly speaking, is rarely met with. Thus there is dementia with mania, the desire of incendiarism, disposition to suicide, to homicide, with automatic gestures.

Generally, the gastric organs perform their functions with regularity in dementia. Sometimes, however, deglutition is impeded. The pulse is feeble, and preserves an acceleration we have observed in the other kinds of alienation. Frequently we remark an abundant accumulation of fat. Dementia follows a progressive course, during which the degradation of the intellectual faculties is seen to be gradually affected, until at length the patient falls into a state of more or less complete moral annihilation.

Sometimes, however, mania succeeds to dementia, which undergoes a transformation.

Commonly, dementia ends in cerebral marasmus, in a peculiar condition only

seen in the insane. The patient wastes away, his body becomes bowed, atrophied, and ankylosed; lying in bed, his knees are in the air, his head scarcely touches anything. Intelligence goes first, then instinct, and the man ends in being no more than a stomach, calling in vain upon the cerebral centre for assistance. Dementia may go on for many years, but from the moment that cerebral marasmus appears, a few months, or weeks, carry the patient to the grave. Death mostly comes on suddenly.

Stupidity.—As to its form, this condition resembles the other kinds of dementia. It differs essentially, in offering a great prospect of recovery. It has been regarded as an elevated degree of melancholy, a phrenalgia passed over into a state of dementia. This would be the *melancholia attonita* of ancient pathologists. This view is perhaps not far wrong.

FOURTEENTH LECTURE.

General paralysis.—The patient now brought to us presents a look that expresses astonishment. See his smile of imbecility, his faltering gait! He is affected with general paralysis. His age is thirty-four. His wife is twenty-one. His life has been marked by great excesses. He is a cooper, employed in a brewery. He was habitually given up to drunkenness and debauchery. He has not been happy in his home. His attitude betrays a loss of equilibrium; in walking, he spreads out his legs, and carries his arms out and his head backwards. I will speak to him. You will remark in his answers, a hesitation quite characteristic in the formation of words and phrases. . . . He does not understand what we say to him. He sees, but he does not look; he does not conceive in seeing. He no longer recognises anybody. His discourse is marked by strong exaggeration. He is subject to gusts of passion; he excites himself, and complains. He has delirious ideas; he thinks everything belongs to him; he talks of his fine clothes, his beautiful wife, his handsome chairs, his goblets of crystal.

The disease has been preceded by a long period of incubation, marked by weakening of the phrenic faculties. Then symptoms of delirious mania appeared. From the commencement, a slight hesitation was observed in his speech, a certain tension was noticed in his neck, a fixedness in his look, a *facies* quite peculiar betrayed to the eye of the practitioner the gravity of the case.

Generally, the course of this disease is marked by two orders of phenomena, permanent and transitory. The first consists in gradual failing of conception, memory, and all the phrenic faculties; the others in outbreaks, effervescence, crises, fits appearing at various intervals, and which, after having first manifested themselves by rigidity, entail relaxation of the muscles, paralysis, finally convulsions and sopor.

In this disease one pupil is at times more dilated than the other. M. Baillarger has described this as a new symptom of general paralysis. But it also belongs to mania.

In general paralysis it is not so much the *strength* of the movements that is lost, as their *precision*, as Foville has well remarked.

As the paralysis of intelligence and motion advances, sores form on the back; frequently the patient gives no sign of suffering, but fever consumes him. A comatose state supervenes, epileptiform convulsions appear. The pharynx becomes paralysed.

General paralysis is rarely an acute condition. It is a chronic disease which may terminate in the course of a year, but which may last two, three, five years. Most frequently the patient finishes in the second year.

Several questions present themselves touching the pathology.

Is paralysis of motion the radical symptom of the disease?

Does the phrenic psychical state succeed the disorder of motion?

Is the phrenic state, the moral intellectual disorder, primitive; and is the paralysis of motion the consequence of the first state?

Is then general paralysis, without perturbation, a marked failing of the psychical state?

Is there psychical paralysis without muscular paralysis?

I answer, that no one of the phenomenal groups of general paralysis has a constant priority in the order of development of the disease. These phenomena by turns predominate, muscular failure, intellectual failure, delirium of ideas. Each of these elements may have a maximum or a minimum of value in the course of the disease.

'The most initial' of all the paralyisiform symptoms is the hesitation of speech; but it is not always the first.

Latterly M. Baillarger has communicated facts which prove the importance of the basis of the movements.

M. Lunier adduces facts to show that general paralysis is a distinct disease from mental alienation. M. Moreau considers the physical symptoms and the psychical symptoms as belonging to the same source. I can call to mind cases which exhibited the distinction between the physical and psychical symptoms.

Is the disease ever secondary? is it always primary?—In the great majority of cases it is primary. I do not remember even to have seen it occur as an accidental symptom in the course of melancholy, as a consequence of ecstasy, or of a destructive phrenopathy. But I have observed it, occasionally, as an epiphenomenal termination of delirious congestive mania.

The general paralysis of the insane must be distinguished from *apoplectiform paralysis*.

IMBECILITY, *amentia*, *morosis* of Sauvages.—The imbecile have not lost their intelligence; the faculty is only weakened, imperfect. The imbecile have become such after birth; they could never learn to read or write, or a trade; they express themselves with tolerable correctness; but judgment is wanting, and very few of them have memory.

Imbecility is frequently associated with other states, especially with vices of character, or attacks of mania. Many imbeciles are thieves, many quarrelsome, mischievous, &c. It is rarely associated with delirium.

IDIOCY is a congenital dementia in which the degradation of the intellectual faculties is such as to debase man below the brute, even below the plant, since all the functions are so lowered, that without the assistance of another person, some idiots would be incapable of feeding themselves.

Most modern authors have made a distinct genus of idiocy. I do not see the necessity of this. I therefore include it under the genus *amentia*, *dementia*, *secordia*, *fatuitas*, *paranoi* of the Greeks.

Idiocy is frequently associated with epilepsy; sometimes with paralysis, or muscular atrophy. M. Ferrus has established a distinction between idiocy and cretinism.

Imbecility and idiocy have an especial interest in relation to legal medicine.

Imbeciles and idiots frequently figure before courts of justice, accused of outrages against decency, of theft, arson, and murder.

FIFTEENTH LECTURE.

Of the manner of considering the organic alterations which present themselves in mental diseases. The anatomical diagnosis.

How identical cerebral symptoms may indicate diseases of different nature.—The anatomical diagnosis comprises, 1st, the knowledge of the phenomena supplied by opening the body; 2nd, the signs which indicate in the living body the changes in the brain and other organs. Mental alienation does not mean what is called a disease of the brain, a disease of the encephalon. Cerebral

diseases may manifest themselves without mental alienation; and this may exist without cerebral disease. In either case, there are often presented identical phenomena. Art should consist in determining whether this symptom be a functional disorder, whether that, announce an anatomical lesion. Most frequently alienation is a functional affection; but this latter may induce a cerebral disease. The symptoms which indicate a *cerebral disease* are, incoherence, the delirium of ideas, impairment of conception, loss of memory; coma vigilans, coma, sopor especially; loquacity, gesticulations; more or less general tension of the muscular system; a great prostration; singing in the ears; vertigo; pains in the head, in the limbs, a painful condition of the skin, formication; nausea, vomiting, dilatation, contraction of the pupils.

Now, incoherence, sopor, disorder of the intelligence, have a quite different signification in mental diseases to that which they possess in affections of the brain, in febrile diseases, and in nervous affections and intoxications. In the insane, delirium is far from indicating an inflammation of the meninges; stupor is by no means connected with inflammatory or purulent congestion. In cerebral diseases, there exist direct relations between the cause and the effect more appreciable than in mental diseases. In the latter, the action of the anatomical element escapes us.

The idiopathic phrenopathies are the only diseases to which it is proper to give the name of mental affections; they have especial origin, course, and phenomena. We must admit these fundamental species of mental diseases; idiopathic phrenopathies; symptomatic; and sympathetic phrenopathies.

It follows, that in order to be a mental physician, your practical knowledge ought not to be limited to the insane; you ought not to be a speciality in the rigorous acceptance of the word. I cannot tell you often enough that the way to make progress in the study of the phrenopathies is to call to your aid the general notions of the theory and practice of medicine. It is especially when the question of the diagnosis and treatment of mental affections arises, that the necessity of having seen many insane and many patients of other kinds is felt in all its force.

Cerebral alterations which present themselves in mental diseases; the symptoms by which they may be recognised.—I reduce to the number of nine the lesions of the encephalon, to which I wish to direct your attention. These are: 1. sanguineous congestion of the meninges, of the brain, of the meninges and brain. 2. Serous congestion of the same structures. 3. Cerebral softening. 4. Opacity, thickening of the arachnoid. 5. Meningeal and cerebro-meningeal adhesions. 6. Cerebral induration. 7. Cerebral hypertrophy. 8. Cerebral atrophy. 9. Faults of conformation of the brain and skull.

Even this number may be greatly reduced. The essential conditions are: sanguineous and serous congestion, softening, induration.

Congestion occurs under two different forms. It may be active, arterial; it may be an inflammatory state, or closely approaching; or it may be passive, venous. The active state declares itself in alienations, characterised by violent reactions. But you must not believe that the brain is congested every time that the phrenic disorder is announced by the violence of the passions. Four times out of five, the most turbulent mania is not accompanied by a true congestive state. The most fearful errors are committed in this respect.

Diagnosis of cerebro-meningeal determination.—The symptoms which give rise to uneasiness in the physician are: the persistence of the disease; the increase of the disorder in the ideas; the complete absence of days of calm and lucidity; the resemblance of an acute delirium in a chronic case; confusion, incoherence of ideas, proceeding side by side with the decadence of conception and of memory. There is a veil stretched over all the conceptions.

What marks more purely congestion is: 1st, the robust plethoric constitution of the subject; the injection of the face; a certain brilliancy of eye; a

strong heat on the surface of the cranium; the febrile frequency of the pulse; sweats, often clammy, bathing the surface of the head; ammoniacal, hypostatic urine; an air of astonishment, a deafness, a blindness of the intelligence, drunken ideas.

What marks especially congestion, inflammatory fluxion of the brain and meninges, is: the agitation of the patient; the stiffness of his limbs; disorder in his muscular acts; prostration; involuntary evacuations; a dementia which follows mania; convulsions: paralysis. Rarely, however, the symptoms express a fierce inflammatory state, and end quickly. Generally the disease assumes the chronic form.

Sudden abolition of the faculty of speech, of all the faculties of the intelligence, denotes compression of the cerebral surfaces. These patients present a false appearance of apoplexy; but true paralysis is wanting: the eyes remain open, and the patient can move his limbs. Automatically the patient carries his hand to his head, which seems to suffer shocks; it is tossed from side to side; sometimes there is grinding of the teeth, distortion of the features, stiffness of the limbs. Sometimes vomiting announces a rapid and fatal progress.

These symptoms may give way under appropriate treatment. In speaking of crisis, of treatment, I shall take care to show you that recovery is sometimes preceded by a febrile, comatose state: this must not be confounded with that condition which may be the effect of a congestive inflammatory orgasm of the meninges or of the brain. In this state there are stages: first, a period in which the ideas give a colour to the passions: so long as these are clear, though extravagant, there is no fear of congestion and its consequences. To this period succeeds a phase of obscuration of the ideas and of disorder in their manifestation. A third period marks the gradual extinction of the faculties of the understanding.

Bayle first called attention to the relation between notions of greatness and the congestive state of the meninges, and the cortical substance of the hemispheres.

In the presence of this group of symptoms, we may believe that a congestion is forming on the surface of the brain; and this especially when the subject has been addicted to alcoholic drinks. You will also meet with it in persons become insane from the action of the solar rays on the skull, or under the influence of intense radiant heat. It is observed in cases of retrocession of an exanthema.

When congestion leads to sanguineous effusions between the meninges, the symptoms are usually very alarming. They are characterised by a sudden change in the physical and moral state of the patient. First, a comatose state, then a sensible diminution in the sum of the intellectual acts. At other times, a complete hemiplegia, or convulsions.

In drawing the diagnosis of these congestions, of these orgasms, of these spinal inflammations, take care not to perceive in the phenomena which characterise them the whole disease. I shall tell you by and bye that mental alienation is not in its intimate nature a congestive state, an inflammation. Inflammation may be developed in alienation, it may be strictly associated with the first state; but it is not the sum of the mental affection.

If an epileptic maniac dies during a fit, we may be almost certain to find a state of red congestion of the meninges and of the cerebral substance, even ecchymosis, blood extravasated in the tissue of the membranes, especially in the temporal regions. If the epileptic die during an interval, nothing of the sort is found. So it is with alienation; the congestive state is subordinate to the exaltation of the intellectual phenomena.

Out of five hundred patients congregated here, I cannot at this moment show you one case of fluxionary congestion in its first phase.

Venous or black congestions.—I believe that there are amongst the insane venous congestions, independently of the congestions which proceed from a nervous

orgasm. Cases of venous hyperæmia are frequent in the dementia following upon chronic mania. It is especially when the patient has vociferated much that the cerebral substance is found gorged with black blood. In melancholy, we find sometimes the sinuses and veins of the arachnoid strongly congested; but it is rare to find an active congestion in these patients. Do not lose sight, also, that the congestion is at times only apparent, and that it depends upon cerebral hypostasis formed in the last moments.

The congestional state is a very frequent symptom in general paralysis; out of 25 cases, it is met with at least 11 times.

Microscopical examination.—I have committed to the microscope cerebral substance congested and not softened, and I have satisfied myself that the anatomical result of congestion consists in a cellular development. It seems as if the primitive cells constituting the intimate web of the brain undergo a certain distension; that they swell from the presence of a fluid. There is a remarkable difference between congested cerebral substance and that which is not: in the first, the field of the microscope is covered by a stratum of granulated matter interspersed with corpuscles, which I conclude to be fatty, since they dissolve in ether. I will state, with reference to these corpuscles, that they are seen in the healthy brain as well as in the diseased.

Serous collections.—We meet in the insane with serous accumulations in the cavities of the membranes and in the ventricles. It is principally the pia mater that is œdematosed; the œdema is united with a venous congestion. The serosity is more frequently gathered between the meninges than in the ventricles. Sub-arachnoidean collections are especially common.

Recently there has been discovered an œdema seated in the brain itself. MM. Foville and Ferrus were the first to speak in precise terms of an interstitial infiltration of the brain. Esquirol, it is true, had mentioned it. M. Estoc has studied this condition with great care, pointing out the kind of alienation in which it is most frequently seen.

The origin of serous collections is in many respects an enigma in the study of mental diseases. It must be concluded that most commonly they depend upon venous congestion. But frequently we find, instead of a red injection of the vessels, a true anæmic condition of the cerebral substance. In many cases of chronic dementia, serous collections are formed when the shrunk brain falls away from the internal table of the skull. Magendie's experiments seem to explain the formation of an intra-cranial fluid whenever a vacuum is formed between the surface of the brain and the internal surface of the cranium.

Diagnosis.—Here is a patient who, I have been told, is affected with stupidity. I exhibit him to you again, in order to point out the symptoms, or rather the appearances which announce the presence in the brain of an excess of serosity, infiltrated in the nervous tissue itself, perhaps also on the surface of the convolutions.

The whole head appears swollen. The colour of the skin of the face is quite peculiar: it has lost its freshness, it has become serous. There is a heaviness in the eyelids; the eye is dead, void of expression. The globe of the eye projects behind the lids; the lids are slightly swollen; the eyebrows are moist; the head is bent upon the chest; the patient's attitude is heavy; he answers only yes, or no; his urine passes involuntarily; the tension of general paralysis is wanting. You observe no hesitation in his speech, nothing in his ideas that reveals ambitious exaggerations or conceptions.

Consider all these symptoms in the aggregate, and you will arrive at a collective phenomenon. This phenomenon is a state of stupefaction, of moral numbness. Thus modern observers are inclined to admit, as a constant thing in stupidity, a serous collection, even œdema of the brain.

Serous collections always announce themselves by some false appearance of a comatose state. This occasionally calls to mind serous apoplexy. The serous

apoplectiform condition is frequently met with in general paralysis. It is announced by transitory paralysis of an eyelid, an arm, a leg, remarkable for disappearing in a few days.

In a hydrocephalic patient, properly so called, there are indications always sure by which the presence of a serous collection may be known: vomiting, dulness, mark the progress of the evil; the dilatation of the pupils, strabismus, paralysis of the eyelids, piercing cries, extreme slowness of the pulse, confirm it. But in the hydrocephalus of the insane, all often becomes doubt and uncertainty. In many patients we meet after death, serous collections, even considerable, that we were far from suspecting.

SIXTEENTH LECTURE.

Cerebral softening. A patient affected with general paralysis.—This patient is about thirty years old; he has been here a few months. You recognise his disease at a glance; that silly look, that uneasy bearing, cannot deceive you. Make him talk, and you will observe the hesitation of his speech; make him move, and you will see the uncertainty of his movements. Nothing so strange as his discourse: he talks of his strength, of the number of languages he knows—Russian, Danish, Spanish,—of his beautiful children, his young wife, the sums he has won. It is among patients of this category that you must seek for cerebral softening. It is not found in all cases of general paralysis, but it is found exclusively in this affection.

By what sign can we recognise this organic lesion? The difficulty is great. If I consult my own observations, I discover in general paralysis and other paralyzes, that which reveals to me that the cerebral substance is undergoing decomposition. This is a permanent, ascending, progressive paralysis. It is not the apoplectiform paralysis, but something resembling it. Ideas of grandeur, of exaggeration, the puerile aspect, which remind us of drunkenness, are not signs that indicate exclusively softening. They belong rather to an irritation of the grey substance, a work of decomposition that is preparing. The most characteristic marks of this state are clearly defined paralysis.

Cadaveric phenomena.—It is almost always the cortical substance that we find softened in the insane: this may be either the deep or the superficial layers. Sometimes there is softening of the white substance; but this alteration rarely affects the white substance exclusively; sometimes the white and grey substances are softened together. The parts most frequently affected are, in my opinion, the parietal regions, next the frontal. Sometimes the softening invades the upper median border of the hemispheres. It is rare to find it affecting the inner median surface of the hemispheres. Sometimes we see in the insane softening of the optic thalami, of the corpora striata, of the cerebellum.

In the dead body we recognise cerebral softening by—1, the abnormal aspect of the altered part; 2, the want of consistency of the cerebral substance; 3, changes in the intimate structure revealed by the microscope.

1. The grey substance acquires an ashy hue, greenish, sometimes violet, or yellowish, livid, rosaceous, or brownish; or it may be of a striking white.

2. The substance gives way under the slightest touch; it turns to pap, a semi-fluid element, easily taken up by the edge of the scalpel. The softening usually occupies a large extent. It is rarely an isolated condition; it is associated with serous collections, vascular engorgements, adhesions, thickening of the arachnoid.

3. MM. Vogel and Gluge, and Pool of Amsterdam, have communicated interesting observations on the microscopic appearances. There have been found: capillary engorgement; extravasations of blood; inflammatory fibrinous products; nucleated cells; fatty globules; cumuli of red substance. These researches were made on subjects not insane. My investigations have been made on the sane and insane. I have compared the conditions observed in the two

classes. My results differ from those of the microscopists I have named. I have not found traces of an inflammatory state: no fibrinous coagula, no inflammatory corpuscles, no islets of red matter.

The grey substance of a maniac seen under 400 degrees shows opaque nucleoli, tolerably regular in form, but irregularly distributed, soluble in ether, showing their fatty nature. I have found the same in bodies of persons not insane. They must not therefore be considered as a morbid result. The rest of the field seems formed of a cellular, granular web. It is in this web that the morbid histological phenomena take place.

If the cerebral substance is simply congested, you will perceive an infinity of cells, offering the appearance of a piece of Florence marble.

If the congestion has passed to the state of softening, you will have the same elements, but modified. In this case, the whole field presents a surface composed of these cellules. They are very irregular in their disposition, which may depend upon the traction the cerebral substance has undergone in charging the field. These cellules are polygonal, and have a visible nucleus. Each has usually but one; many are empty; and it is easy to detect here and there free nuclei. The cellules appear heaped together. At different points are remarked fatty cellules, recognised by their greater size and transparency. In a few points we discover blood-globules, but larger than usual, distended.

With great care, at a lower power, I have sometimes met with capillaries; they were gorged with deformed blood-globules. These capillaries were found at the surface of the cortical substance; deeper towards the white substance I could not distinguish them.

Such are the lesions which may be proved experimentally; but there is in this disease a complete series of phenomena, of which we cannot form an idea without the aid of the imagination and of reasoning. It is sometimes permitted to us to extend our judgment beyond the limits imposed by our senses; there are demonstrations, interpretative facts, which result from the collective examination of many facts, which, taken singly, are sometimes without value.

Intimate phenomena.—We may figure to ourselves the succession of the phenomena which characterise the formation of cerebral softening in the insane thus:—First, an excitation of the passions, of the ideas; a stimulation caused by the abuse of alcohol, or otherwise. A constant call of the circulating fluids into the capillaries. Distension of the capillaries. Engorgements. Stagnation of the fluids in these vessels. A serous transudation into the organic areolæ. An accumulation of serous fluids into the tissue of the pia mater. A penetration of these fluids into the grey substance of the brain, effected through the channels which give passage to the capillaries connecting the pia mater with the cortical substance. Then, the deformation of the primitive cellules. Considerable distension of these cells. Displacement of their nucleoli.

Clearly the nucleoid cells found in softening are not new formations; they are the cells of the fundamental tissue of the grey substance. But they may exist ten times bigger than in the normal state. The reason is, that in softening, a serous fluid, escaped from the vessels, has penetrated them, and caused the distension. It is a true imbibition. In my opinion there is in the softening of the insane a maceration of the cerebral substance, a distension and a rupture of the primitive cells.

Let us dwell a moment upon what I have called the channels which transmit the capillaries running from the pia mater into the grey substance. These channels have attracted no attention; they are only discovered by a lens; they are, on a small scale, to the capillaries of the cortical substance what the canals of the liver of the capsule of Glisson are to the vessels of the vena porta, the arteries and biliary ducts. Myriads of capillaries, visible to the naked eye, in cases of stasis or inflammation, quit every point of the pia mater and dip into the cortical substance. It is by these vessels, which have not anastomosed, that the

pia mater is made adherent to the grey substance of the convolutions. In cases of congestion these vessels acquire such a volume as to be distinguished by the naked eye.

Thus we may easily understand that in cases of serous collection between this covering and the convolutions, a road may be opened into the intimate tissue of the cortical substance, alongside the vessels. This infiltration produces maceration of the central substance.

A result little known, yet of great importance, is the extreme aptitude of the cerebral substance to be easily penetrated by foreign liquids. It may be compared in this respect to a sponge. Fred. and Herm. Nasse have shown that softened brains are much less easily penetrated by water than healthy brains.

When I say that general paralysis may exist without appreciable softening, I do not wish to utter an absolute dogma. The organic detritus may no doubt exist when our means of investigation cannot discover it.

Another remark : In every softening there is not paralysis.

I am anxious to say that the entire pathological state of this alteration is not summed up in congestion or in serous exaltation. What proves this is, that hyperæmia, sometimes considerable in mania and melancholy, rarely leads to softening. Cerebral softening is not a normal termination of the congestion in the insane. It is the same with stupidity which offers some analogy with the symptoms of softening, and which, viewed as an anatomical lesion, presents another serous infiltration. And yet in stupidity the cerebral tissue rarely passes into softening.

There is therefore something at the bottom of general paralysis, of the chief tactile alteration to which it is united, an obscured point, a boundary hitherto impassable.

Must we then admit different kinds of softening ? I hesitate not to answer in the affirmative.

There is an acute softening, a chronic softening. It is the latter which is found in the insane. I believe that there are anæmic softenings.

Let us add that the causes which debilitate the organism are commonly hurtful to patients affected with this disease, and that the analeptic régime tends to prolong their days.

Opacity of the arachnoïd thickening.—In many cases the arachnoïd is much altered. Part injections of this membrane are not frequent unless the patient was much exalted in the domain of ideas, or of a very sanguine temperament. The most frequent appearance is a greyish white thickening. It may also present milky spots, and striæ. In some rare cases we find vitriform masses between the membranes. These alterations are principally found on the hemispherical surfaces, on the cranial layer, and not on that which covers the falx cerebri. They are rarely seen at the base of the organ ; sometimes they are confined to one hemisphere ; most frequently they extend to both. This condition especially belongs to chronic cases. It is really an isolated alteration. When isolated arachnoïdeal thickening is present, it is symptoms of compression that are observed. There is however absence of paralysis of the limbs unless the thickening be considerable or accompanied by sanguineous effusions. If false membranes have formed between the meninges, they most commonly determine convulsions, alternating with a soporous state and transitory paralysis.

I recognise four morbid conditions, proceeding from the same source, which, in a diagnostic point of view, demand a long practical experience. These are, injection of the meninges, serous collections, chronic thickening of the membranes, cerebral softening. There exists between all these an affinity of origin, and a similitude of form. They all lead to obliteration of the intellectual acts. But an attentive observer may distinguish the individual character of each. Thus a disorder simulating a marked degree of drunkenness, corresponds more particularly to a fluxion of the meninges, especially of the pia mater, and of that of the cortical substance.

The presence of serosity causes different shades of dulness, stupor, inertia, coma.

Thickening, the retraction of the arachnoid compressing the brain, causes to a certain degree a diminution of intellectual energy, but leaves considerable freedom of motion.

Softening affects more directly motility, and paralysis more directly the motor influx, especially of speech.

I cannot say often enough how important it is to acquire two general notions. That which teaches us to know a brain disordered only in its functions, not in its structure; that which enables us to recognise a brain diseased in its anatomical elements.

Clearness, neatness of expression, absence of disorder in the connexion of ideas, demonstrate that there exists no anatomical lesion: this is only known by observation, failure of the phrenic acts. To this, we must add the elements of appreciation. It is known that alterations of tissue are rare in melancholy, ecstasy, delirium, folly.

It is in two forms of alienation that doubt always arises: dementia, mania.

Conviction springs up when we see signs of compression of cerebral destruction. This certainly is wanting so long as the signs which belong to paralysis are absent; *i. e.*, paralysis in the formation of words, of the intelligence, of memory, of movements, of prehension, of locomotion. What adds to the clearness of the diagnosis is the reunion of paralysis, of convulsions, of ebrious ideas.

Meningo-cerebral adhesions.—I have no settled opinions concerning adhesions between the arachnoid and the dura mater. It would be a grave error to conclude that they are the result of inflammation.

Cerebral induration.—It is considered that induration is met with in 25 out of 100 insane. It is most frequently found in chronic mania, in dementia, and in maniacal epileptics; also in general paralysis with softening. I think I have observed that this alteration is most commonly seen at the base of the brain and in the external walls of the lateral ventricles. More than once I have found the pons Varolii so hard as to be nearly crepitant under the knife. Induration of the olivary bodies is not at all rare. It chiefly affects the grey matter; but may affect the white also.

The intimate nature of the pathological alteration is difficult to determine. My microscopical investigations have taught me nothing precise.

Are there any symptoms which permit us to recognise induration in the living subject? Hitherto they have not been pointed out.

Cerebral hypertrophy and atrophy.—I have often observed hypertrophy, especially in maniacs. In these cases the convolutions are so compressed against the skull, that they are sometimes only traced by lines. This state is peculiar to congestional mania.

Atrophy may be general or partial. Partial—it is often confined to a series of convolutions. General—the brain has diminished in volume, and is found separated from the inner table of the cranium, as Gall was the first to observe. It has been supposed that atrophy was most common in the frontal region, and I have several times verified this observation. Parchappe says it is met with in 16 out of 100 cases. He calls it cerebral marasmus.

This condition belongs especially to chronic dementia. I think also it belongs to melancholy.

Vices of conformation of the skull and brain.—These are chiefly seen among idiots.

Of the anatomical alterations of the abdominal and thoracic viscera.

M. Parchappe, the man who has best investigated this subject, calculates that out of 1000 insane patients, 423 present after death lesions of the cerebro-spinal system; 262 lesions of the digestive canal; 140 in the respiratory system.

A. *Affections of the alimentary canal.*—I have found thickening of the walls of the stomach. Scirrhus induration of the pylorus, inflammation, ulceration, softening. But in most instances these have appeared to me independent of the mental malady. I have observed in suicide inflammation of the intestinal mucous membrane, once in a case where there was no cerebral disease. Some physicians have attributed great importance to the pathological state of the intestines in melancholy.

2. The ideas of Esquirol as to the displacement of the colon have been confirmed; in the insane we do indeed sometimes find this intestine lodged in the true pelvis.

3. Inflammations of the peritoneum, the omentum adhering to the mesentery, and this latter to the abdominal wall, &c.

4. In suicide, considerable abdominal lesions are observed.

B. *Affections of the liver and spleen.*—It is not rare to find red spots upon the liver. It is found crepitant, often gorged with blood, and exhibiting traces of inflammation. Alterations in the liver are frequent in drunkards. But I have examined the bodies of persons dead from delirium tremens without finding any appreciable lesion of the liver.

I remember a case of joyous mania which presented to me an enormous distension of the spleen which contained a very black blood. I asked myself if this case did not support the opinion of some of the ancients who placed gaiety in the spleen and anger in the liver.

In the melancholic, the suspension of respiration—*i. e.*, its performance at long intervals and imperfectly, explains in a great measure the frequent presence of engorgements of the system of the vena portæ and especially of the liver and spleen. Very often the mesenteric veins are found loaded with black blood.

In dementia we sometimes find enormous distensions of the urinary bladder.

I have recognised disease of the ovaries, after a violent delirium accompanied by hysterical symptoms. The menstrual suppression, so frequent in insane women, should point to the conjecture that the ovaries are frequently affected.

C. *Affections of the lungs.*—In estimating the pathological condition of the lungs, we must bear in mind the influence of the variations of temperature to which the insane have been exposed, their cries and vociferations, disease of the pneumogastric nerve, insufficient food, spermatic evacuations, the use of cold douches, a strumous constitution.

Pulmonary tuberculosis is frequent amongst the insane. It has appeared to me to have a direct relation to mental alienation. Sometimes this is allied with meningal or cerebral tuberculosis. A tuberculous condition of the substance of the brain has been denied. But this is a serious error. I have observed it frequently; and I may call in the testimony of my colleague, Professor Mareska.

I have observed *gangrene* of the lungs, and this has been exclusively in cases where the patients refused to eat. This has been subsequently confirmed. In fasting madmen also gangrene of the intestinal mucous membrane has been found. There is evidently a disordered hæmotosis in these patients.

The symptoms of pulmonary gangrene are announced in too clear a manner to allow a practised eye to be deceived. There is no disturbance in the mechanical phenomena of respiration. It is in the blood that a profound alteration exists. The general colour of the skin indicates this; it becomes yellow, brownish, the colour of beer. The conjunctiva puts on a bluish tint. A remarkable decomposition is observed in the features. Red spots and swellings appear in different parts of the body. The breath exhales a horrible fætor. Sometimes a slight cough appears: the patient at first expectorates frothy mucus, next the mucus is streaked with blood; then this is replaced by a brownish sanies of extreme fætidity.

We must not, however, conclude that gangrene of the lungs takes place in every case of refusal to eat.

Affections of the heart.—These are not infrequent among the insane. You will not lose sight of the fact that the heart plays a great part in the moral acts. The cries and continual groans of the patients disturb the action of the heart, and drive the blood back upon the right cavities; sorrow, muscular prostration, render the dilatation of the chest imperfect, and oppose an obstacle to the circulation of the blood.

Conclusion. General inductions.—The anatomical diagnosis presents no inconsiderable difficulties in its application to mental diseases. But I will endeavour to sum up what science permits as to formulize in this respect. Every kind of phrenopathy may present cadaveric lesions; but these may also be found in other diseases, in which their signification is altogether different.

Melancholy.—If melancholics die accidentally during the phrenalgic state, they present for the most part no trace of organic alteration either of the brain or meninges. The solidity of the cerebral substance, a venous turgescence, a slight sinking in, a slight serous collection, are the only phenomena observed inside the cranium.

If the disease is protracted beyond the ordinary term of cure, if it become insensibly associated with debility of the functions of the understanding, we may admit that a change has taken place in the organic change of the encephalon, an opacity of the arachnoid, a hyperæmia of the pia mater, and most frequently an inter-membranous serous effusion.

In melancholy, more than in any other kind of mental disease, autopsy leads to the discovery of visceral lesions, of engorgements of the vena portæ, inflammations of the peritonæum, affections of the chest; but, in the majority of cases, these are the result of the disease or of fortuitous circumstances.

Ecstasy.—It is rare to see patients affected with ecstasy succumb to the disease: we must conclude that it is exempt from any disorganizing condition; and that in this affection as in melancholy, as in the generality of manias, the cerebral disorder is simply functional.

Mania.—When mania is accompanied by injection of the conjunctiva, great heat in the scalp, we must conclude that there is cerebro-meningeal hyperæmia, but not inflammatory or disorganizing. It is the expression of a functional exaltation, of an orgasm communicated to the vascular system.

When mania is characterized by a great influx of will, by cries, tumult, agitation, the encephalon is gorged with blood. We often find in patients who have vociferated much, congestions of the pia mater and sub-arachnoid ecchymosis: they usually exist in the parietal and temporal regions.

If the patient die accidentally in the course of a tranquil mania, if he have preserved intact conception, memory, the affective sentiments, autopsy hardly ever reveals the slightest organic alteration. This is also true of manias which break out periodically; in the intervals, the brain presents nothing abnormal.

When mania is complicated with epilepsy, the head is congested at every fit; often there are found sub-arachnoidal ecchymoses of the brain itself, of the cortical and medullary substance, indurations of the pons, of the medulla oblongata.

When mania, after having lasted several months, passes insensibly into a state of intellectual prostration, we can no longer say with certainty if there exist in the patient one or other of the anatomical alterations I have pointed out. If the symptoms of mania go on diminishing, and those of dementia increasing, we may be almost sure that a morbid organic change has been wrought. Most frequently we then meet with congestion of the cortical substance, of the pia mater, thickening of the arachnoid, rarely with softening.

Sometimes in maniacs we find hyperæmia, opacity of the arachnoid; we must conclude that these lesions mark a serosity unusual in this disease.

I do not hesitate to lay it down as a principle, that in the majority of cases mania excludes appreciable organic lesions.

Folly.—I cannot say what is the condition of the brain in incendiary, homicidal, fasting suicidal madmen. If the disease has been of long duration, a morbid condition of the thoracic and abdominal viscera is frequently recognised.

Delirium.—The same uncertainty pervades the entire series of phrenopathies we have comprised under the name of delirium.

Dementia.—It is especially in dementia that we must expect to find anatomical lesions of the brain. Amongst all the phenomena which announce these lesions, the principal are, subtraction, nullity, volition of the cerebral and muscular acts. These are occasioned by compression, destruction, or even by irritation of the cerebral pulp.

In dementia, more than in any other phrenopathy, we may expect thickening, shrinking of the arachnoid, infiltration, vascular engorgement of the pia mater, a modification in the vascular state and texture of the neighbouring convolutions.

But we cannot always say that there is, or that there is not softening.

We may often affirm the existence of a serous collection.

As to cerebral induration, the little certainty as to its symptoms does not allow us to conjecture its presence.

It is essential to remember that dementia is not invariably linked with an organic state of the brain; this disease is often completely independent of such a state.

Such is the character of the greater number of pure primitive dementias. In senile dementia, in that form which follows immediately upon a strong moral commotion, in dementia the result of great misery, in that which is connected with spermatorrhœa, the cadaveric inspection usually reveals no morbid state whatever. I except serous accumulations, a state of discoloration of the grey substance, falling in of the brain. But I repeat it; it is not always permitted to us to say, I shall find in such a patient a discoloration, a shrinking, an inter-membranous hydrocephalus.

Here we terminate the phenomenological part of mental diseases.

We shall next discuss the etiology of these affections.

ON THE CONNEXION BETWEEN MORBID PHYSICAL AND RELIGIOUS PHENOMENA.

NO. 3 OF A SERIES.

BY THE REV. J. F. DENHAM, M.A., F.R.S., &C.

BEFORE tracing this connexion further by the aid of mere observation, it may be desirable to ascertain whether any sanction for our views of it can be derived from the Scriptures. It is proposed, then, to consider in this paper what the Scriptures teach respecting the body, or "the flesh," as they frequently term it, its physical qualities, and the consequences, of various kinds, produced on the mind, soul, or spirit, by its union with these intellectual and emotional principles of our nature.

The Scriptures begin by acquainting us with an immense deterioration inflicted upon the body and external circumstances of the first parents of the human race, and entailed upon all their posterity, and from which the most important practical consequences are both deducible by our reason, and are also fully recognised in other parts of the sacred volume. In the second

chapter of the book of Genesis, it is stated that God formed man out of the dust of the ground in the *country* of Eden, and by breathing into his nostrils the breath of *lives*, made man a living soul; and afterwards took him and put him into the *garden* of Eden to dress it and to keep it; and that out of the ground of that garden grew every tree that is pleasant to the sight and good for food, and the tree of lives also in the midst of the garden, and the tree of the knowledge of good and evil:—that out of the man in this perfect physical state of his nature, and placed amid such favourable external circumstances, woman was formed:—that they were both naked and not ashamed:—and in the first chapter, which is a previous summary of the narrative, that God looked upon all things that he had made, the human male and female in his own image and after his own likeness included, and blessed them; and that everything seemed in the view of his infinite perceptions to be “very good,” proper, and happy. In the third chapter, both the physical constitution and external condition, as well as the moral state and enjoyment, of the human species are represented as undergoing a great and adverse change. For, in consequence of their transgression, they have now become conscious of the shame of nakedness, of guilt, and fear—enmity between them and the serpent is instituted, the woman’s sorrow and her conception are greatly multiplied, her will and wish are subjected to those of her husband, the ground is cursed, with at least an exuberance of troublesome vegetation, man is doomed to eat his bread in sorrow from it, in the sweat of his brow, all the days of his life, till by a chronic dissolution (“dying thou shalt die,” margin) he should return to his original dust. He is driven out of the garden “to till the ground” of the country of Eden, out of which he had been taken, debarred access to the tree of life by cherubim and a flaming sword; and the very species of his future food was altered from “every herb bearing seed, which is upon the face of all the earth, and every tree in the which is the fruit of a tree yielding seed,”* to “the herb of the field.”† Now it is impossible not to conclude, according to all our present observation and experience respecting the effects of physical causes upon the mental and moral constitution of man, but that these great changes in the case of our first parents, and in regard of all those physical causes which chiefly affect our nature, must have produced the most extensive alterations on their mind and moral dispositions; and these changes and their effects being transmitted to all their descendants, fully prepare us for the subsequent records, and for the existing phenomena of the perturbed state of the mental and moral nature of man. It does not appear that any change was inflicted *directly* on either the intellect or the moral affections of human nature, but these remaining in their original state, we see sufficient in the indirect effects produced upon them by means of the alteration in man’s physical state and circumstances, to account not only for the moral but even mental disturbances which we perpetually experience and observe even under the most favourable physical circumstances, and for those still greater disturbances in proportion as those physical circumstances become by any means whatever still further removed from their normal condition. The well known power of such circumstances to pervert the mind and dispositions of mankind is thus afterwards described by Moses in regard of the effects of famine. “Thou shalt eat the fruit of thine own body, the flesh of thy sons and of thy daughters, which the Lord thy God hath given thee, in the siege, and in the straitness, wherewith thine enemies shall distress thee: so that the man that is tender among you, and very delicate, his eye shall be *evil* toward his brother, and toward the wife of his bosom, and toward the remnant of his children which he shall leave: so that he will not give to any of them of the flesh of his children whom he shall eat: because he hath nothing left him in the siege, and in the straitness, wherewith thine

* Gen. i. 29.

† Chap. iii. 18.

enemies shall distress thee in all thy gates. The tender and delicate woman among you, which would not adventure to set the sole of her foot upon the ground for delicateness and tenderness, her eye shall be *evil* toward the husband of her bosom, and toward her son, and toward her daughter, and toward her young one (see the margin) that cometh out from between her feet, and toward her children which she shall bear: for she shall eat them for want of all things secretly in the siege and straitness wherewith thine enemy shall distress thee in thy gates.* This passage affords a specimen of the solution furnished by the Scriptures themselves of the mental and moral alienation naturally resulting from the pressure of physical circumstances. Before adducing other and more comprehensive specimens of it, it may be remarked that the Hebrew writers and their Greek translators used the words denoting, or relating to, the body, mind, soul, and spirit of man, so promiscuously, and even interchangeably, as, in the opinion of a learned and pious prelate of our church, to render it "doubtful whether they had any word ever 'standing for a purely immaterial principle in man," and that by their referring intellectual perceptions to the heart לב Cor. שְׁחוֹת, *præcordia*, כֶּבֶד, *jecur*, כְּלִיֹּת, *renes*, מַעַס, *viscera*, καρδία, θυμός, νοῦς, φρὴν σπλάγχνα, they at least intimated the close community between what we now call the material and immaterial parts of our nature,† and with perfect consistency, therefore, represent the sympathy between the body, soul, and spirit to be most intense and pervasive.‡ We pass over a multitude of incidental references to that sympathy in the Old Testament. In the apocryphal books we find the following allusions to it: "For the thoughts of mortal men are miserable (margin, fearful). "For the corruptible body presseth down the soul, and the earthly tabernacle weigheth down the mind that museth upon many things."§ "Great travail is created for every man, and a heavy yoke is upon the sons of Adam, from the day they go out of their mother's womb, till the day that they return to the mother of all things. Their imagination of things to come, and the day of death, their thoughts, and fear of heart; from him that sitteth on a throne of glory, unto him that is humbled in dust and ashes; from him that weareth purple and a crown unto him that is clothed with a linen frock. Wrath and envy, trouble and unquietness, fear of death, and anger, and strife; and in the time of rest upon his bed do change his knowledge. A little or nothing is his rest, and afterward he is in his sleep, as in a day of keeping watch, troubled in the vision of his heart, as if he was escaped out of a battle. When all is safe he awaketh, and marvelleth that the fear was nothing. Such things happen unto all flesh, and is *sevenfold more upon sinners.*"|| In St. John's gospel the distinction is made, "born not of blood, nor of the will of the flesh, but of God."¶ "That which is flesh is flesh, and that which is spirit is spirit."*** "Ye must be born again," and our Lord tells us that even the righteous shall become "children of God by being the children of the resurrection."†† He makes the following extensive admission in excuse for his disciples when, in the garden of Gethsemane, "he found them sleeping for sorrow, for their eyes were heavy," "the spirit indeed is willing, but the flesh is weak."‡‡

We now proceed to the examination of St. Paul's ideas and instructions respecting "the flesh and spirit," and the consequences of their union, as these are developed in his epistles, and by taking his writings in their probable chronological order. In his epistle to the Galatians, "flesh and blood" is the

* Deut. xxviii. 53—58; comp. 2 Kings vi. 28, &c.

† Bp. Law, "Theory of Religion," London, 1820, 423, 424.

‡ See Jer. iv. 19; Is. xv. 5; xvi. 11; xxi. 3, &c.

§ Wisdom of Sol. ix. 14, 15.

|| Eclus. xl. 1—8.

¶ Chap. i. 13.

** Chap. iii. 6.

†† Luke xx. 36.

‡‡ Matt. xxvi. 41.

collective expression for the origin of everything opposed to the better dictates of our nature. He "confers not with it," declares that "the flesh lusteth against the spirit, and the spirit against the flesh, that they are contrary the one to the other, so that we cannot fully do the things that we would;" and among the works of the flesh not only includes the more obvious sensualities, but even "idolatry, witchcraft, (or perhaps spiritual sorcery, under the term poisonings), hatred, variance, emulations, wrath, strife, seditions, heresies, envyings;" he asserts that "they that are Christ's have crucified the flesh with the passions thereof," that "he that soweth to the flesh shall of the flesh reap corruption, but he that soweth to the spirit shall of the spirit reap life everlasting." In his first epistle to the Corinthians, "the wise man after the flesh" rejects the gospel; carnal is opposed to spiritual, and carnal means "walking as men:" it is "by the destruction of the flesh that the spirit is saved in the day of the Lord Jesus." He himself "keeps under his body, and brings it into subjection, lest by any means when he had preached to others, he himself should be a cast-away." In his discourse on the resurrection, the body, at death, is said to be sown in corruption, in dishonour, in weakness, a mere natural and earthly body; flesh and blood cannot inherit the kingdom of God, neither doth corruption inherit incorruption: we shall be changed; this corruptible must put on incorruption, this mortal must put on immortality. In his second epistle he calls the body "an earthly house in which we groan, being burdened, earnestly desiring to be clothed upon with our house which is from heaven, that mortality might be swallowed up of life." In his epistle to the Romans, he gives the following comment on the Mosaic account of Adam's transgression; and its effects on the human race. "By one man sin entered into the world and death by sin, and so death passed upon all men for that all have sinned. Through the offence of one, many—that is, mankind at large—are dead. The judgment was by one to condemnation: by one man's offence death reigned and judgment came upon all men to condemnation. Our old man is crucified with Christ that the body of sin might be destroyed. He that is dead is freed from sin." He thus exhorts—"Let not sin reign in your mortal bodies that ye should obey it in the lusts thereof, nor yield your members as servants to unrighteousness." He speaks of "the infirmity of the flesh;" the motions, or, as in the margin, the passions of sin did work in our members to bring forth fruit unto death. In the seventh chapter he complains that he is "carnal, sold under sin. For that which I do I allow not, for what I would, that I do not, but what I hate, that do I. It is no more I that do it, but sin that dwelleth in me. In me—that is *in my flesh*—dwelleth no good thing, for to will is present with me, but how to perform that which is good I find not. The good that I would, I do not; but the evil which I would not, that I do. I find then a *law* that when I would do good, evil is present with me. *I delight in the law of God after the inward man*, but I see *another law in my members warring against the law of my mind*, and bringing me into captivity to the law of sin which is in my members. O, wretched man that I am! Who shall deliver me from the body of this death? or this body of death. So then with the *mind I myself serve the law of God*; but with the *flesh the law of sin*, the law of sin and death. The law was weak through the flesh. God sent his own Son in the likeness of sinful flesh. To be carnally minded is death. The minding, or disposition of the flesh, is enmity against God; it is not subject to the law of God, neither indeed *can* be—the body is dead because of sin—our mortal bodies. If we live after the flesh, we shall die, but if we through the Spirit do mortify the deeds of the body, we shall live. The creature was made subject to the bondage of corruption; we groan within ourselves, waiting for the adoption, to wit, the redemption of our body. Make no provision for the flesh to fulfil the lusts thereof. Those who cause divisions and offences serve their own belly." To the Ephesians he speaks of "the old man which is corrupt according to the deceitful lusts." To

the Philippians he speaks of "our vile body, or the body of our humiliation." To the Colossians he represents the false teacher as "beguiling them in a voluntary humility and worshipping of angels, intruding into those things which he hath not seen, vainly puffed up by his fleshly mind—which things have indeed a show of wisdom in will worship and humility and neglecting of the body; not in any honour—to the satisfying of the flesh."

Nor are these opinions respecting the body, &c., peculiar to St. Paul. St. James declares that "every man is tempted, when he is drawn away of his own lust and enticed." He gives the following account of the origin and progress of sin. "Then when lust hath conceived, it bringeth forth sin: and sin when it is finished bringeth forth death. Envy and strife in the heart is earthly, sensual, and devilish. Wars and fightings come of the lusts which war in the members." St. Paul in his second epistle to Timothy speaks of certain "silly women laden with divers lusts and pleasures, ever learning, and never able to come to the knowledge of the truth:" of "those who will not endure sound doctrine, but after their own lusts heap up to themselves teachers, having itching ears, who turn away from the truth and shall be turned unto fables." St. Peter speaks of the "fleshly lusts which war against the soul;" he lays down the principle that he that hath suffered in the flesh, as Christ did, hath ceased from sin; speaks of "the corruption that is in the world through lust;" of "scoffers walking after their own lusts," and describes their scepticism. St. Jude predicts that mockers "should also so walk;" and speaks of "hating even the garment spotted by the flesh." It is also worthy of notice that the apostles describe the early heretics as peculiarly sensual and intemperate. Thus St. Peter portrays them as "counting it pleasure to riot in the daytime; having eyes full of adultery, or of an adulteress, walking in the lusts of uncleanness;" and St. Jude speaks of them as "feeding themselves without fear." In order to counteract the mental and moral alienation occasioned by voluptuousness, the primitive church enjoined fastings, vigils, &c. The Old Testament abounds with allusions to the physical causes of sin. It attributes Lot's incest to his intoxication, and Isaac's partiality for Esau, and consequent attempt to frustrate the divine appointment, to his love of his son's venison. Moses compares Jeshurun, the poetical name for Israel, to a pampered courser that "waxed fat, and kicked."* "Fatness of heart" is a usual metaphor for moral and religious insensibility; "great of flesh" is Ezekiel's description of a people abandoned to sensuality, and he adds, "this was the iniquity of Sodom: pride, fulness of bread and abundance of idleness, and they were haughty."† Solomon describes the infatuations and transgressions resulting from drunkenness,‡ and the extreme self-conceit of the slug-gard.§ On the contrary, absence from wine, or strong drink, and eating any unclean thing, is prescribed, in one instance at least, as the instrumental means of a miraculous removal of sterility. Total abstinence from the produce of the vine, in any form, was enjoined on the Nazarites "who separated themselves unto the Lord."|| The Mosaic law prohibited articles of food unfavourable both to health and self-government, and was, in fact, a system of moral dietetics, in order that "Israel might be an holy people unto the Lord;" and circumcision itself was derived from moral reasons.¶ The foregoing quotations fully show that the Mosaic doctrine of the proximate cause of natural and moral evil among the descendants of Adam—originating in the change inflicted on Adam's physical nature and external circumstances, and which change was entailed on all his posterity, *for the purposes of their moral probation*—is uniformly

* Deut. xxxii. 15.

† Chap. xvi. 26, 49, 50.

‡ Prov. xxiii.; comp. 1 Esdras iii. 17, &c.

§ Prov. xxvi. 16.

|| Judges xiii. 14; Num. vi 2, &c.

¶ See Article, Circumcision, in the "Cyclopedia of Biblical Literature."

maintained from the commencement of the sacred canon to its close. That doctrine virtually includes the origin of even Eve's transgression; for, according to St. James, "lust," or desire, is the germ of transgression; but *all* unlawful desire, by whatever means *introduced* into the mind, *never*, as we know by consciousness, overcomes the moral powers but by means of a disturbance first raised by it in the physical part of our nature, and whereby the moral powers are for the time overwhelmed: and this origin of the first transgression, and of all its consequences, both shows the peril of forming even the incipient idea of any transgression, and is in perfect harmony with the statement of the Scriptures, that the salvation of the human race originated in the "pity of God" (Ep. to Titus ii. 3, margin); and further, by explaining the *modus operandi* of the original sentence, it also directs our attention to the sanitary and moral government of the body as one chief and essential means of human virtue and happiness: it also seems to reconcile us to the stern necessity of dying, and to endear to us the hope of a resurrection to a physical state of incorruption, moral "power," and "glory," in "a spiritual body"—teaches patience in regard of our own infirmities, and charity in regard of the infirmities of others, as well as submission to the limitations to our knowledge imposed on it by this "muddy vesture of decay."* In a word, the scriptural evidence now adduced shows us that the philosophy of physical circumstances is largely and decisively recognised by Revelation. But, what is more important to our present purpose, this doctrine affords incontestable support to the conclusion that every human mind, without exception, is liable, at least, to morbid influences, arising from its union with a disordered, mortal, and sinful body, even in its most healthy state, and under the most favourable external circumstances, and proportionably more so as the body is still further removed from its original state by disease, hereditary or incidental, chronic or temporary, occurring in the course of nature, or produced by some vice or mismanagement of the body, or by the reflex morbid effects upon it resulting from evil passions, ideas, &c. It shows also both the necessity and the practicability of constantly distinguishing between the pure perceptions of reason, or of that "mind with which we still serve the law of God," and those morbid influences of the body on the mind, and of avoiding all the means whereby the latter may be augmented. To use the words of Bishop Taylor, "Since it is our flesh and blood that is the principle of mischief . . . we must endeavour to abstain from those things which by a special malignity are directly opposed to the spirit of reason and the spirit of grace. . . . Nature is weak enough of itself, but these things take from it all the little strengths that are left to it, and then man can neither have the strengths of nature nor the strengths of grace."† Similar, too, is the doctrine of the ninth Article of the Church, which speaks of "the fault and corruption of the nature of every man, that naturally is engendered of the offspring of Adam, and is of his own nature inclined to evil, so that the flesh lusteth always contrary to the spirit, and this infection of nature doth remain even in them that are regenerated." The classical scholar will readily remember parallel references to the influence of the body on the mind, in Greek and Roman writers. The opinions, to the same effect, of the Catholic Fathers may be seen in the commentators on the Old and New Testament. Other subjects connected with the present can now only be alluded to,—such as the influence of the temperaments and external circumstances of the several authors of the Scriptures upon their writings, the diseases mentioned in the Scriptures, and their characteristic effects on the sufferers, as the elephantiasis of Job, Saul's melancholy, Naaman's leprosy, Nebuchadnezzar's zoanthropia, and the physical theory of demoniacal possessions.‡ It is hoped, however, that sufficient has now been advanced to

* *Merchant of Venice*, Act i., Sc. 5.

† Sermon on the Flesh and the Spirit.

‡ See Article, Demon, by the writer, in the "Cyclopaedia of Bib. Lit."

demonstrate, by scriptural authority, the reality and importance of the subject of these papers, the remainder of which will be devoted to classifications of those co-existing morbid physical and religious phenomena which have come under the writer's notice. His wish to show that the doctrines of modern pathology are perfectly consistent with those of Revelation, and even highly illustrative of them, and to remove the suspicions with which the former are still too commonly regarded, must be his apology for the present digression from his principal design.

CRITICAL REMARKS ON THE "PLEA OF INSANITY."

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(Continued from page 281.)

MORE recent in date (1831) is that of George Waters, reckoned "similar" by Alison, who thus relates it. "The pannel, in a rude and strange manner, had taken his son by the hand, who was playing near the Water of Leith, at Bonnington, and had a fork in his possession. As he got nearer the place where the fatal deed was perpetrated, his look appeared, to the witnesses who saw him, wilder and more frantic. He was seen looking into the water, where the body was thrown after it was committed, in a raised and insane manner. He was seen near the spot, in a subsequent part of the same day, moving about like a deranged person, and declared he was Sir William Wallace, and an honour to his country. When apprehended, he admitted having killed his son, made no resistance, spoke incoherently, and prayed aloud. The evening before he had spoke very insanelly about having been at Inchkeith on a raft. In November, 1829, he had been committed for disturbing his neighbours; he had then the appearance of *delirium tremens*, and was confined in a strait-waistcoat; and his relations had subsequently written to the Leith Police to look after the pannel, as he could not take care of himself. In these circumstances, the insanity was clearly proved, and so the jury held, with the approbation of the court; and he was confined for life!" The circumstances, beyond all doubt, demonstrated insanity, as understood by medical men, but, by no means, absolute alienation of reason, sought for by some lawyers. The former, we shall immediately see, may err, like the latter, in regard to the existence of the disease. "It is by no means unusual," says Alison in continuance, "to find instances of persons committing crime under the influence of insanity, who yet give no indication of it when conversing in jail with a medical man." Every one will be prepared for such a remark who understands the well-known fact that the malady, though ever so intense, admits of intervals or remissions of manifestation, and, generally speaking, requires peculiar excitement in order to display itself unequivocally. Alison gives an example of the kind, in the case of Janet McCallum, September, 1829.

"She was charged with having stolen a child belonging to her mistress, as well as a quantity of clothes from her house. Insanity was pleaded in bar of trial; but, after the examination of a single witness, who said he saw nothing insane about her, it was withdrawn, and she pleaded guilty. The case, however, was certified to the high court (from the circuit at Stirling, it appears), to give time to investigate the state of the woman's mind, which was very suspicious from the style of her declaration, and from most of the stolen articles having been found torn to pieces in the wood near her master's house. It ultimately turned out that she had been insane, and escaped some months

before from a lunatic asylum near Greenock, and had been considered insane all her life. Still, the medical men who examined her in Edinburgh declared they did not regard her as 'void of reason;' but, as the crime had evidently been committed in a state of mental alienation, the prosecutor did not move for sentence, and she was confined till her sanity was restored." The case was given on Sheriff Alison's own report, and, probably, is one in which he was counsel. I could wish for more information respecting it, and, especially, touching the grounds on which the medical men in Edinburgh declared the woman not "void of reason." The same thing, I may remark, might be predicated of nearly all the patients (amounting to hundreds) who ever came under my care, though, most assuredly, insane and certified to be so by competent members of the medical profession; and, I verily believe, a like testimony will be given by the majority—possibly all—of those individuals who have held, or now hold, superintendence in lunatic asylums. Of course, idiotic and purely demented persons must be excluded from the list.

"Somewhat of the same description," according to Alison, "was the case of James Cummings, 12th January, 1810, charged with murder" (reported, I presume, in a subsequent edition of Hume's work). Some years before, it seems, he "had met with a severe injury on the head, but had recovered, enlisted, and was not considered by his fellow-soldiers as insane; but he was silent, solitary, and quarrelsome when in liquor. One morning, when on guard as a sentinel, being teased by a fellow-soldier, he became suddenly outrageous, and pursued him into the barracks. Having arrived there, he pushed at a woman with his bayonet, and missed her, but immediately after struck at a fellow-soldier coming out of a door, and killed him on the spot. The jury, by a plurality of voices, found the pannel insane at the time of committing the murder; but there seems good ground for Baron Hume's opinion, that it would have been more agreeable to law to have found him guilty, but recommended him, on account of a constitutional irritability, arising from his wound, over which he had no control, to the Royal mercy." More agreeable to law—very possibly, I would say; but neither to common sense nor to justice, if, as was admitted in the preceding case, "the crime had evidently been committed in a state of mental alienation." Surely, "a constitutional irritability, arising from a wound, over which (meaning, I take for granted the former) the man had no control," was as valid a plea as the condition of the woman against whom "the prosecutor did not move for sentence. I confess myself unable to discover any fixed, not to say, rational, rubric, by which both Hume and Alison are guided in deciding on such matters. But to proceed.

"Insanity was clearly proved," says the latter, "in the case of William Douglas, May 28, 1827, who had set fire to the furniture of the lodgings which he occupied at Peebles, and nearly burned the house. He was convicted of attempt at fire-raising, but, in consequence of his state of mind, ordered to be confined for life." This needs no comment.

"The law of England," we are now told by Sheriff Alison, "is founded on the same principles;" and he gives us, in illustration, the well known case of Hadfield, indicted for shooting at the king in Drury-Lane Theatre (1800). The details are unnecessary here. "It was quite clear," says Alison, "that this man was mad, and his case was eloquently pleaded by Lord Erskine. Lord Kenyon held that, as the prisoner was insane immediately before the offence was committed, it was probable that he had not recovered his senses at the time he fired, and that, as there was no reason to believe that he had recovered his sanity in the interval between the two events, he was entitled to an acquittal, which he accordingly received, and was ordered to be confined for life." But how, I ask, does this tally with the opinion of Baron Hume, above approved, in favour of a verdict of guilty, accompanied by a recommendation to the Royal mercy? Farther, too, I would ask, if, in his conduct throughout, Hadfield did

not exhibit a good deal of method and design—evidently the product of reason—therefore showing its existence, though, undoubtedly, struggling against or labouring under delusion?

Hitherto we have had under review the first general rule, or position laid down by Alison—that, namely, which insists on insanity being “of such a kind as entirely deprived the person of the use of reason as applied to the act in question, and the knowledge that he was doing wrong in committing it,” in order to “a complete bar to punishment.” We have now to consider the second, announced in these words, “If it appear from the evidence that the pannel, though partially deranged, was not so much so as to relieve him entirely from punishment, the proper course is to find him guilty; but, on account of the period of infirmity of mind, which he could not control, recommend him to the royal mercy”—a suggestion, it will be observed, very similar to what has already been given on the authority of Baron Hume.

We are told, in exposition, that “cases frequently occur in the highest degree perplexing both to the court and jury, which can only be justly resolved by an application of the principle and mode of proceeding above set forth. They are those in which the accused was to a great degree to blame, but would not probably have committed the fatal act but for some constitutional or supervening derangement which rendered him not so far responsible (thus marked in *italics* by Alison) as those who, by enjoying their reason unclouded, have no defence whatever against atrocious actions. In such cases there is a mixture of guilt and misfortune; for the former he should be severely punished, for the latter the extreme penalty of the law should be remitted. This can only be effected by adopting the course above pointed out.” It will be speedily seen, however, that this course has not always been successful in issue, and, indeed, one might have anticipated a difficulty in reconciling severe punishment, supposing it just, with a remission of penalty. Possibly, however, Alison means only *condemnation* on one hand, and *pardon* on the other. If so, the certainty of the alliance, it would seem, cannot be reckoned on: and, consequently, juries may become of opinion that, when they really desire to show mercy, they must provide for it by their verdict. Can they ever hesitate to do so in the face of evidence which satisfies them of the existence of such infirmity of mind as could not be controlled? How shall they draw a line of distinction between that state and the condition of one who, though understanding right and wrong, is yet unable to use reason in a special act? And will not a “constitutional or supervening derangement,” sufficient to exempt from some responsibility, because, in its absence, the accused would probably not have committed a certain deed, appear to be a very good ground for suspecting that the whole evil depended on it, and, therefore, that no punishment should follow? Of course, some exceptions must be made, as, possibly, in a few of the cases to which I now hasten. “Thus, in the case of William Gates, 21st Dec., 1811, who was tried for shooting his wife with a musket, insanity was pleaded in bar of trial, but failed. On the evidence, it appeared that whisky and consequent irritability of temper, had a large share in the deed, but that, even when sober, he was of a melancholic temperament, and not like other men. The jury found that the act was committed in a state of insanity. But Baron Hume’s opinion is obviously well-founded, that they should have convicted and recommended to the royal mercy.” But why so, one might reasonably ask, if they were satisfied by evidence of insanity at the time, and that, even when sober, the pannel “was not like other men”?

“In like manner,” continues Alison, “in the case of Pierce Hoskins, 23rd April, 1812, who was tried for the murder of his own child, of four years old, in a fit of drunken insanity, it appeared that the pannel, when intoxicated, was perfectly mad for days together, and in that state he committed the fatal deed. He was acquitted by the jury; but Baron Hume declares that it is

questionable whether an assize do right when they sustain the plea of this lower degree of infirmity of mind, exasperated only into a short fit of outrage and fury by excess of liquor; or where they receive as evidence the atrocity or brutality of the act itself that has been done, though there have been no previous symptom of the disease." A lower degree of infirmity of mind! Why, it appears, he was "*perfectly mad* for days together, and *in that state* committed the fatal deed." In the absence of details, probably well known to Hume, I can say nothing on the last point in his remarks.

"The latter course," says Alison, meaning what Hume advised, "was followed in the case of Alexander Campbell, 18th December, 1809, who was found guilty of robbery, but recommended to mercy, 'on account of a certain degree of weakness of intellect, to which he appears to be subject,' and received, in consequence, a transportation-pardon"—no doubt, it may be imagined, better than hanging, as in days of yore, but still a severe punishment, and, one would think, very unsuitable for a man of weak intellect.

"In like manner, in the case of Susan Tilly, 11th March, 1816, a more rational verdict was returned. It there appeared, from the testimony of two physicians and a surgeon, who had visited the pannel in jail, that she was of a weak mind, laboured under religious dreams, spoke of her interviews with the devil, said he had tempted her to burn the barn, and that God had reproved her by scorching her hands on the occasion. On other subjects, however, she reasoned correctly, and knew the distinction between right and wrong. She was convicted, but recommended to mercy, and received in consequence a pardon from the Crown." So far well and happily, I would say; but her manifest insanity, as judged by medical men, would have warranted a different verdict, and *secured* what *might not* have been granted; for though, as Alison says, "the same course was followed at Jedburgh, autumn, 1831, in the case of Samuel Rogers, he was not quite so fortunate. "He was accused of murdering an Irish reaper, in the course of harvest, whom he pursued into the river Tweed; and a considerable degree of insanity was proved at the trial. The jury found the pannel guilty, 'but, in respect of the *alleged* insanity, recommend him to mercy.' " We shall be somewhat enlightened here by Alison, who himself reports the case. "This way of wording the verdict was incorrect; but their meaning evidently was that a *certain degree* of insanity only was proved, insufficient to liberate the pannel from punishment altogether, but sufficient to excuse him from the extreme penalty of the law." It may be so; but they had better have expressed themselves by leaving out a word liable to misinterpretation; and, still more, in my humble opinion, by an acquittal, if satisfied as to "a considerable degree of insanity." My reason appears in what follows:—"The case was not so viewed in the proper quarter, for he was executed in pursuance of his sentence"—guilt, doubtless, being deemed to preponderate over misfortune. But, pray, even admitting the excess, was not something due to the less weighty element, according to the course approved? Perhaps—but we are not told so—the poor man had the comfort of a silken halter!

Sheriff Alison generalizes from such examples in relation to a special point thus—"This seems the proper way of resolving those cases, unhappily too numerous, in which a fatal act has been committed in the course of a temporary fit of insanity, arising from excessive drinking. In all such cases there is room for a distinction. If the pannel, naturally sane, has been rendered mad *solely by drink*, and this infirmity was known to him, he seems to have no defence whatever against the legal punishment of his actions; for it is the duty of every man to abstain from indulgences which lead to perilous consequences; and as intoxication is no defence, so the insanity consequent upon its excessive and criminal indulgence seems to be as little. But, on the other hand, if either the insanity has supervened from drinking, without the pannel's having been aware that such an indulgence, in his case, leads to such a consequence, or if it

has arisen from the combination of drinking with a half crazy or infirm state of mind, or a previous wound, or illness, which rendered spirits fatal to his intellect, to a degree unusual in other men, or which could not have been anticipated, it seems inhuman to visit him with the extreme punishment which was suitable in the other case. In such a case, the proper course is to convict, but, in consideration of the degree of infirmity proved, recommend to the royal mercy."

I reckon it unnecessary to dwell on these various considerations—liberal, generally speaking, as they are—farther than to say that, while *wilful drunkenness* is unquestionably immoral in itself, and perhaps, therefore, with propriety deemed by the law rather an aggravation than an alleviation of a criminal charge, as Alison afterwards mentions, the habit of drinking to excess is, in many instances, the consequence of or an attendant on real mental disorder, arising from other and very different circumstances. The whole subject, in truth, is beset with difficulties, to which I can only point in this most superficial manner.

Alison's third general proposition is in these terms:—"If the pannel, though somewhat deranged, is yet able to distinguish right from wrong, in his own case, and to know he was doing wrong in the act which he committed, he is liable to the full punishment of his criminal acts." This is nearly to the same purport as that of a former statement, or may be deduced from it; and, accordingly, says our author, "It has been already noticed that the true test of insanity is to be found, not in the ability to distinguish between right and wrong in the general case, but with reference to the particular case of the pannel; and that he is amenable to the same punishment as other men, when his conscience tells him, or is in a situation to have told him, that what he did was wrong. But anything short of this complete alienation of reason will be no defence; and mere oddity of manner, or half craziness of disposition, if unaccompanied by such an obscuring of the conscience, will not avail the prisoner. This is proved by a multitude of cases, both in the Scottish and English practice." Simply remarking, what might be shown by analysis, that Alison does not here express himself throughout with perfect accuracy, I go on to the cases considered in point. They are those of Thomas Gray and Robert Bonthron (for which see my notes on Hume), then we have that of Sir Archibald Kinloch, introduced by the explanatory observation, "It is not indispensable that the madness should be continued in respect of time, so as it be clearly established at the date of the crime." Following Hume again, Alison tells us that "the plea of insanity must be received with much more difficulty in cases proceeding from the desire of gain, as theft, swindling, or forgery, and which generally require some art and skill for their completion, and argue a sense of the advantage of acquiring other people's property"—details being added of the cases of Thomas Henderson (as in Hume), John Smith, spring, 1827, and Alexander Duff, spring, 1829, which latter two claim attention. They are preceded by a remark to the effect that "such a defence, as was made in the former, has been very frequently attempted in subsequent cases, but hardly ever with success," for a reason stated—"it is difficult to figure that state of mental alienation which leads pannels to lay their hands on other people's property, or, if they labour under such an illusion as made them mistake it for their own, which induces them to adopt the art, skill, and concealment necessary for its effectual perpetration. Such cases, however, do sometimes occur," as, for example, in Smith, charged with horse-stealing, but evidently insane, and treated as such; then, as to Duff, similarly charged, having stolen a horse out of a stable in the night, "and, with some art, having untied the door, which was fastened with a string, but he had afterwards abandoned it on the roadside, where it was found next morning among some corn, at the distance of five miles from the place of theft." "The whole circumstances," continues Alison, "evinced a disordered

mind, and the charge, in consequence, was not insisted on by the prosecutor;" adding, as a general principle, "In all cases where such a defence is pleaded, the great thing to attend to is the subsequent conduct of the pannel, and whether he evinced any symptoms of conscious guilt, or a desire to conceal what had been done subsequent to its commission; for, if he did, it is difficult to see how the plea can be well-founded, that he knew not the criminal nature of his actions." I shall offer only two short remarks on the whole of this deliverance, for, against such authority, "established, moreover," as Alison notices, "in the English practice," it would be vain to argue. The first is, that no one accustomed to see maniacs can have the least difficulty in figuring to himself the very state of mental alienation referred to as a sort of improbability, more especially if he take into account, as he ought and will, the existence of various propensities—moving powers—whatever they may be, and however denominated, totally distinct from reason or judgment. And, secondly, I have to say, as also matter of experience, that "the great thing," on which Alison relies as conclusive, is in truth quite fallacious, worthy of no confidence in determining the sanity of an individual at the time of committing any deed, however criminal and atrocious. In other words, subsequent conduct, to the amount of entire rationality, is perfectly compatible with previous derangement; and, in point of fact, which Alison seems to have overlooked when making one of the above statements, some of the cases recorded give no small support to the position now maintained. I shall allude to one only, because what he says of it is peculiarly cogent in the matter. It is that of Sir A. Kinloch, in which the jury found insanity proved, "though he regained his senses completely a short time after the melancholy event."

Among the English instances decided on the same principles which have ruled in Scotland, we have, first, that of Lord Ferrers, tried for murder before the House of Peers. "It was proved that he was occasionally insane, and incapable of knowing what he was doing (one might have expected this to be held sufficient excuse); but the murder was deliberate, and, when he committed the crime, he had capacity sufficient to form a design and know its consequences. He was found guilty, and executed."

2. Arnold, charged with shooting at Lord Onslow. "It clearly appeared that the prisoner was, to a certain extent, deranged, and that he had greatly misconceived Lord Onslow's conduct, but formed a regular design, and prepared the proper means for carrying it into effect. He was convicted, but, at Lord Onslow's intercession, reprieved, and confined for life." In this case, Mr. Justice Tracy laid it down to the jury, "that the defence of insanity pleaded against a great offence must be clearly established; that it is not every idle and frantic humour of a man which will exempt him from being accountable for his actions, but such a deprivation of reason as renders him as an infant, a brute, or a wild beast, incapable of knowing what he was doing—a condition, I unhesitatingly affirm, such as is not exemplified in one out of a hundred persons requiring and actually receiving humane treatment, with the kindest sympathy, in our large asylums for lunatics. At the time of writing this sentence, ninety-four patients were under my own care; a few of them—three or four—were altogether or almost entirely fatuous; but, even comprehending these—because still indicating a portion of intellect—I might have safely said that none realized the character of an irresponsible maniac, such as Mr. Justice Tracy describes."

3. Parker, indicted for entering the service of France, then at war with this country. His defence was insanity. He had been weak from infancy, and it had been thought surprising that he was received into the army. But he had deliberately entered the foreign services, and knew what he was doing, stating as a reason, that it was "more agreeable to be at liberty and have plenty of money, than be at want in a dungeon." He was convicted, "under the direc-

tion of the court, that insanity was not established." Alison makes no comment on the case. I will do so, but it shall be short. The man's reasoning was precisely that of a madman; indeed, quite like the process adopted by a clergyman, recorded by Dr. Abercrombie, and to which I may advert hereafter.

4. "Bowler's case, 2nd July, 1812, accused of shooting Mr. Burrowes, was one of considerable difficulty," according to Alison. "Insanity, occasioned by epilepsy, was the defence pleaded. He had an epileptic fit in July, 1811, and since that time had been very strange in his demeanour, eating his meat almost raw, and lying on the grass exposed to the rain, and so dejected that it was necessary to watch him lest he should destroy himself." All this, it might be hoped, would have been reckoned potent enough. But there was more. "A commission of lunacy was produced, dated 17th June, 1812, on which the prisoner was found insane from 30th March last. Mr. Warburton, the keeper of a lunatic asylum, had no doubt of the insanity of the prisoner, and stated that persons subject to that species of madness often took strong antipathies, founded on illusions totally destitute of foundation." Not a doubt of it—Mr. W. was quite correct. But notwithstanding, "the jury, after much deliberation, found the prisoner guilty." In this case, it seems, "Mr. Justice Le Blanc laid it down to the jury, that they had to determine whether the prisoner, when he committed the offence, was incapable of distinguishing right from wrong, or under the influence of an *illusion*, in respect to the prosecutor, which rendered his mind at the moment insensible to the nature of the act he was about to commit, since in that case he would not be legally responsible for his actions; but that, if he was not under such an illusion, or not incapable of understanding the distinction between right and wrong, he was amenable to punishment." Alison adds—"This appears the true view of the subject." One would like to know how the "much deliberation" of the jury depended on this charge.

5. The noted case of Bellingham, who shot Mr. Percival in 1812. "Insanity was pleaded to the jury, and many strong facts brought out in support of the plea, tending to show that the prisoner falsely imagined himself subject to a long series of injuries from that minister." His fate is well known. In his case, Lord Chief-Justice Mansfield laid it down to the jury, that, "in cases of murder, it must be proved beyond all doubt that the prisoner, at the time of committing the act, did not consider that murder was a sin by the laws of God and nature; that lunatics, as long as they can distinguish right from wrong, are answerable for their conduct; and that the mere fancying of a series of injuries which did not exist, was no defence against the charge of murder, if the prisoner were in other respects capable of distinguishing right from wrong." Let us see what Sheriff Alison says on these sentiments, with which, almost evidently, he is not quite satisfied. "On this case it may be observed, that unquestionably the mere fancying a series of injuries to have been received will not serve as an excuse for murder, for this plain reason, that, supposing it true that such injuries had been received, they would have furnished no excuse for the shedding of blood; but, on the other hand, such an illusion as deprives the pannel of the sense that *what he did was wrong* amounts to legal insanity, though he was perfectly aware that murder in general was a crime; and therefore the law appears to have been more correctly laid down in the cases of Hadfield and Bowles than in this instance, though no injustice may have been committed in the actual result." No injustice may have been committed in the actual result—simply—a hanging!—though the verdict was decidedly influenced by a legal opinion, not "the most correct," seeing there was a better, and though many strong facts sustained the plea! Alas—alas! I shall, probably, either find or take occasion to show how indignantly, and yet how justly, at the distance of several years, Lord Brougham expressed himself respecting the deplorable trial of Bellingham. Sheriff Alison here closes the English cases,

and his third main proposition. In relation to one point connected with the former examples adduced, I have a special reason, which may afterwards be patent, for quoting the opinions of an author whose judgment in such matters is worthy of most serious regard.

"The subject of hallucination, in insanity, may be either entirely imaginary and groundless, or may be a real event viewed in false relations and carried to false consequences. This view of the subject bears upon an important point which has been much agitated—the liability of maniacs to punishment—and which has been ably and ingeniously argued by Lord Erskine in his defence of Hadfield. The principle contended for by this eminent person is, that when a maniac commits a crime under the influence of an impression which is entirely visionary and purely the hallucinations of insanity, he is not the object of punishment; but that, though he may have shown insanity in other things, he is liable to punishment, if the impression under which he acted was true, and the human passion arising out of it was directed to its proper object. He illustrates this principle by contrasting the case of Hadfield with that of Lord Ferrers. Hadfield had taken a fancy that the end of the world was at hand, and that the death of his Majesty was in some way connected with important events which were about to take place. Lord Ferrers, after showing various indications of insanity, murdered a man against whom he was known to harbour deep-rooted resentment, on account of real transactions in which that individual had rendered himself obnoxious to him. The former, therefore, is considered as an example of the pure hallucinations of insanity; the latter as one of human passion founded on real events, and directed to its proper object. Hadfield, accordingly, was acquitted, but Lord Ferrers was convicted of murder and executed. The contrast between the two cases is sufficiently striking; but it may be questioned whether it will bear all that Lord Erskine has founded upon it. There can be no doubt of the first of his propositions, that a person acting under the pure hallucinations of insanity, in regard to impressions which are entirely unfounded, is not the object of punishment (meaning ought not to be so). But the converse does not seem to follow—namely, that the man becomes an object of punishment merely because the impression was founded on fact, and because there was a human passion directed to its proper object. For it is among the characters of insanity, not only to call up impressions which are entirely visionary, but also to distort and exaggerate those which are true, and to carry them to consequences which they do not warrant in the estimation of a sound mind. A person, for instance, who has suffered a loss in business, which does not affect his circumstances in any important degree, may imagine, under the influence of hallucination, that he is a ruined man, and that his family is reduced to beggary. Now, were a wealthy man, under the influence of such hallucination, to commit an outrage on a person who had defrauded him of a trifling sum, the case would afford the character mentioned by Lord Erskine—human passion founded upon real events, and directed to its proper object; but no one, probably, would doubt for a moment that the process was as much the result of insanity as if the impression had been entirely visionary. In this hypothetical case, indeed, the injury, though real, is slight; but it does not appear that the principle is necessarily affected by the injury being great, or more in relation to the result which it leads to according to the usual course of human passion. It would appear probable, therefore, that, in deciding a doubtful case, a jury ought to be guided, not merely by the circumstances of the case itself, but by the evidence of insanity in other things. This, accordingly, appears to have been the rule on which a jury acted in another important case mentioned by Lord Erskine, in which an unfortunate female, under the influence of insanity, murdered a man who had seduced and deserted her. Here was a real injury of the highest description, and human passion founded upon it and directed to its proper object; but the jury, on proof of derangement in

other things, acquitted the prisoner, who accordingly soon passed into a state of 'undoubted and deplorable insanity.' In the case of Lord Ferrers, also, it would appear that the decision proceeded, not so much upon the principle of human passion directed to its proper object, as upon an impression that his lordship's previous conduct had been indicative of uncontrolled violence of temper rather than actual insanity."—(*Dr. Abercrombie, Intell. Powers.*)

The remaining propositions set forth by Sheriff Alison scarcely come in my way. But they may be quoted with the briefest possible annotations.

"(4.) The proof of insanity it lies upon the pannel to establish; and, in the case of an insane person having lucid intervals, it lies upon him to show that the criminal act was committed during the continuance of the disease, unless the intervals were of short duration. On part of which—or generally—he adduces Hume's remark as appearing well founded—namely, in reference to the pannel being bound to substantiate his defence if the lucid intervals were long, whereas the reverse is the case where they are extremely short, 'and he was apprehended shortly after the act in a state of furiosity,' thus, namely, 'that the point should be left for the consideration of the jury, rather than made the subject of unbending presumptions which must, in many instances be unsuitable to the justice of the particular case with which they are intrusted.' The *extension* of this remark, I am disposed to think, would be equally proper, to say the least.

"(5.) Insanity may be pleaded in bar of trial, if the pannel be then insane, and the Court, *ex proprio motu*, will take cognisance of the state of a prisoner's mind, if he appear incapable of conducting his defence." Here it is observed, as comparatively a recent thing, that "proof (of insanity) may competently be brought forward by any one capable of speaking to the point, whether contained in the list of witnesses or not; and the proof is taken by the Court itself, without the intervention of an assize." This was first adopted in 1801, and has been since followed.

"(6.) Where the trial goes on, and insanity is found proven by the jury, the Court orders the prisoner to be confined for life, or until caution is found by his friends to put him in a place of safe custody during the remainder of his life." On this point I need not speak. As to sundry and important topics connected with, or proceeding from it, everybody knows many volumes have been, and everybody will expect to be, written. My present object keeps me aloof. It being understood, and Sheriff Alison having stated that, on matters regarding the plea of insanity, there is a correspondence or essential agreement between the laws, as well as the practice, of Scottish and English Courts, I append to these remarks an extract from the *Times* of 20th June, 1843, setting forth minutes of proceedings in the House of Lords, when the Judges delivered their replies to certain questions on the subject.

"The House of Lords met yesterday morning at 11 o'clock, to hear the opinions of the Judges on several questions relating to crimes committed by persons supposed to be insane, or afflicted with monomania. There was a full attendance of peers, amongst whom were Lord Brougham, Lord Cottenham, Lord Melbourne, Lord Campbell, Lord Wynford, Lord Kenyon, and others.

"His Majesty the King of Hanover (who came down to the House exactly at 11 o'clock on horseback, attended by two grooms in undress liveries) was also present, and sat on the woolsack by the side of the Lord Chancellor. His Majesty paid the most marked attention to the reading of the opinion of the Judges by the Lord Chief Justice Tindal.

"His Royal Highness the Duke of Cambridge was also present.

"Mr. Justice Maule, at some length, but in a low tone of voice, stated his reasons for differing with his learned brethren on the questions which had been submitted to their consideration. His Lordship said, that with reference to the fifth and last question proposed—viz., Can a medical man, conversant with the disease of insanity, who never saw the prisoner previously to the trial, but who

was present during the whole trial and the examination of all the witnesses, be asked his opinion as to the state of the prisoner's mind at the time of the commission of the alleged crime, or his opinion whether the prisoner was conscious at the time of doing the act that he was acting contrary to law? or whether he was labouring under any, and what, delusion at the time?—he had no hesitation in saying that such a question could legally be put to a witness. It had been the practice to adopt that course. He had no knowledge of such questions having been successfully objected to. The fact of the Lord Chief Justice of the Court of Common Pleas, and the other distinguished Judges who presided with him on the trial of M'Naughten, having allowed such questions to be put (to Dr. Forbes Winslow), was to his mind a sufficient proof of their legality.

"Lord Chief Justice Tindal then rose and said, that Her Majesty's Judges had most carefully and attentively considered the questions which had been submitted to them by their Lordships respecting insane persons accused of crimes. and, with the exception of his learned brother, Mr. Justice Maule, they were unanimous in the opinion which he was then instructed to read to the House. It was not necessary on that occasion to enter into the facts of any particular case; it would be wrong to do so, as there was such an endless variety, all and each attended with such improbable and different circumstances, that no general rule could be laid down. Every case must be decided by its own particular circumstances. His Lordship said, as the subject was about to come under the consideration of Parliament, the Judges had not lost any time in considering the questions submitted to them: and as they were unanimous, with the exception, as he before said, of Mr. Justice Maule, they did not consider it necessary to give their opinions *seriatim*. The first question propounded for their consideration was as follows:—

"What is the law respecting alleged crimes committed by persons afflicted with insane delusion in respect of one or more particular subjects or persons: as, for instance, where at the time of the commission of the alleged crime, the accused knew he was acting contrary to law, but did the act complained of with a view, under the influence of insane delusion, of redressing or revenging some supposed grievance or injury, or of producing some supposed public benefit?"

"With regard to this question the opinion of the Judges was, that notwithstanding the party committing a wrong act when labouring under the idea of redressing a supposed grievance or injury, or under the impression of obtaining some public or private benefit, he was liable to punishment.

"Second question—'What are the proper questions to be submitted to the jury, when a person alleged to be afflicted with insane delusion respecting one or more particular subjects or persons is charged with the commission of a crime, murder for example, and insanity is set up as a defence?"

"The Judges, in answer to this question, wished him to state that they were of opinion that the jury ought in all cases to be told, that every man should be considered of sane mind, unless it was clearly proved in evidence to the contrary. That before a plea of insanity should be allowed, undoubted evidence ought to be adduced that the accused was of diseased mind, and that at the time he committed the act he was not conscious of right or wrong. This opinion related to every case in which a party was charged with an illegal act, and a plea of insanity was set up. Every person was supposed to know what the law was, and therefore nothing could justify a wrong act, except it was clearly proved the party did not know right from wrong. If that was not satisfactorily proved, the accused was liable to punishment, and it was the duty of the Judges so to tell the jury when summing up the evidence, accompanied with those remarks and observations as the nature and peculiarities of each case might suggest and require.

"With regard to the third question—viz., 'In what terms ought the question to be left to the jury, as to the prisoner's state of mind at the time when the act was committed?'—the Judges did not give an opinion.

"The fourth question was—

"If a person under an insane delusion as to existing facts, commits an offence in consequence thereof, is he thereby excused?"

"The answer to this question was, that the Judges were unanimous in opinion that, if the delusion was only partial, that the party accused was equally liable with

a person of sane mind. If the accused killed another in self-defence, he would be entitled to an acquittal, but if committed for any supposed injury, he would then be liable to the punishment awarded by the laws to his crime.

"With regard to the last question—

"Can a medical man, conversant with the disease of insanity, who never saw the prisoner previously to the trial, but who was present during the whole trial and the examination of all the witnesses, be asked his opinion as to the state of the prisoner's mind at the time of the commission of the alleged crime, or his opinion whether the prisoner was conscious at the time of doing the act that he was acting contrary to law, or whether he was labouring under any, and what, delusion at the time?"

"The Judges were of opinion that the question could not be put to the witness in the precise form stated above, for by doing so they would be assuming that the facts had been proved. That was a question which ought to go to the jury exclusively. When the facts were proved and admitted, then the question, as one of science, could be generally put to a witness under the circumstances stated in the interrogatory.

"Lord Brougham said the House and the country were under great obligations to the learned Judges for the care and attention they had given to the subject, and therefore moved that the opinions read by the Lord Chief Justice be entered on the journals, as he was certain that an almost unanimous opinion would be found of the greatest advantage when in future legislating on the subject.

"Lord Campbell was glad this momentous question had been submitted to the consideration of the Judges. They had been asked their opinion as to the existing law, and the answer, to him, was most satisfactory. They were not requested to give any opinion as to future legislation.

"Lord Cottenham, Lord Wynford, and the Lord Chancellor, expressed similar opinions.

"The opinion of the Judges was then ordered to be printed and entered on the journals."

The questions, it seems then, were five in number; and on four of these, there was unanimity of opinion in the interpretation of the law by the Judges. The sole difference, however, is a very important one, because relating to the actual application of the law in courts, Mr. Justice Maule, the dissentient, plainly referring to a practice which the other Judges represent as illegal. The third question, be it said somewhat paradoxically, was not answered at all. The first, touching responsibility, in a manner involving the whole, is consequently of highest value—yet, singularly enough, the reply to it does not introduce the clause which relates to the special ground at issue, namely, "the influence of insane delusion," which is conspicuous in two places of the query. Thus—"What is the law respecting alleged crimes committed by persons afflicted with *insane delusion*," &c. &c. and "Did the act complained of with a view, under *the influence of insane delusion*," &c. &c. Answer—"Notwithstanding the party committing a wrong act when labouring," &c. &c. (See again the series at large.)

Now, besides the omission, which leaves the answer in the state of a mere truism, if taken without reference to the question itself, the collocation of words seems to me peculiarly ill-chosen. For what, strictly construed, do they really mean? In fact, that the party committing a wrong act is liable to punishment—a position disputed by no one, and, therefore, not here required. The intended meaning, on the contrary, clearly is that, notwithstanding the party labouring under the idea of redressing, &c. &c. when committing a wrong act, he was liable, &c.; or, as might have been expressed, "the (for a) party committing (or who committed) a wrong act, when labouring under the idea, &c. is nevertheless liable," &c. But criticism of this kind—and there might be more—though surely fair where public interests are so much concerned, is vain; for faulty as the language commented on may be, no one can absolutely mistake what the Judges meant—namely, that if, at the time of committing the alleged crime, the accused knew he was acting contrary to law, he is liable to punish-

ment, even although he then laboured and acted under the influence of an insane delusion. And accordingly the answer to the second question expressly says, "that before a plea of insanity should be allowed, undoubted evidence ought to be adduced that the accused was of diseased mind, and that, at the time he committed the act, he was not conscious of right or wrong." "Nothing could justify a wrong act, except it was clearly proved the party did not know right from wrong. If that was not satisfactorily proved, the accused was liable to punishment."

But farther, and conclusively as to a large class of cases, to the 4th question, "If a person under an insane delusion," &c.—the reply is such as to leave no room for doubting—"If the delusion was only partial," &c.; to which is added, almost unnecessarily, one would imagine, "If the accused killed another," &c. The 5th answer strikes me as being somewhat ambiguous, or, rather, not in strict connexion with, or appropriate to, the question, which relates to the medical opinion itself; whereas, the Judges, in the first place, say that "the question *could not be put* to the witness in the precise form stated;" and then, that "when the facts were proved and admitted, then the question, as one of science, *could be generally put* to a witness, under the circumstances," &c. Now, what are these? The medical man is said to be "present during the whole trial and the examination of all the witnesses;" while, what is asked of him—not, be it observed, in any precise form—is simply "his opinion as to the state of the prisoner's mind at the time," &c. or, "whether the prisoner was conscious at the time," &c. or, whether he was labouring under any, and what delusion at the time. But, according to the supposition of the question, the medical man must have had the facts before him (he having been present, as above stated), or, in other words, the facts are supposed to be proved and admitted. When, then, do the Judges mean he is to be asked his opinion? Observe the very question, which is not to be put in the precise form, &c. In short, no small explanation is needed in the whole affair—more light, with greater distinctness of language; and I, for my own part, though willing to concur with Lords Brougham and Campbell, in saying that the House and the country were under great obligations to the Judges for the care and attention they had given to the subject, cannot honestly congratulate them on account of clear and satisfactory results.*

* It is proper to mention that there are different versions of the opinions—a circumstance in itself unhappy, and calculated to bewilder the public mind, already distracted enough on this highly painful topic. In order to mitigate, or, rather, entirely arrest the censure which might visit daring opposition to the decrees of certain eminent legal authorities, I avail myself of some of the sentiments uttered, on a remarkable occasion, by the Hon. Thomas (afterwards Lord) Erskine. They are, in themselves, exceedingly cogent. He is alluding to Lord Chief Justice Hale, who held, that prisoners should be acquitted only when a total and permanent want of reason was proved; and to Mr. Justice Tracey, according to whom, a man, to be exempted from penal consequences, must be one that is totally deprived of his understanding and memory, and does not know what he is doing any more than an infant, than a brute, or a wild beast! Now, how did the eloquent and justly-successful advocate meet these sad dogmas? "If a total deprivation of memory (he of course comprehends 'understanding') was intended by these great lawyers to be taken in the literal sense of the word: if it was meant that to protect a man from punishment, he must be in such a state of prostrated intellect as not to know his name, nor his condition, nor his relation towards others; that, if a husband, he should not know he was married, or, if a father, could not remember he had children; nor know the road to his house, or his property in it,—then no such madness ever existed in this world."

Again, "In all the cases which have filled Westminster Hall with the most complicated considerations, the lunatics and the other insane persons who have been the subject of them, have not only had memory, in my sense of the expression;

AMERICAN INSTITUTIONS FOR THE INSANE.*

WE are again indebted to Dr. Pliny Earle for the subjoined analysis, published in the last number of our able contemporary, the "American Journal of Medical Science," of the reports of the principal American Asylums for the Insane. Commencing with the *Maine Asylum*, it appears that the number of

	Men.	Women.	Total.
Patients at the beginning of the year was	50	34	84
Admitted in course of the year	65	59	124
Whole number	115	93	208
Discharged, including deaths	54	35	89
Remaining at the end of the year	61	58	119
Of those discharged there were cured	28	17	45
Died	11	4	15

Deaths from apoplexy, 4; consumption, 3; general paralysis, 6; pneumonia, 1; and laryngitis, 1.

No epidemic prevailed, and no suicide occurred during the year.

We commend to the physicians of other asylums the method pursued by Dr. Harlow, in reporting the complete list of patients. The following is a synopsis of it.

		Discharged cured.	Improved.	Unimproved.	Died.
Persons admitted	1033	404	190	234	118
" re-admitted	194	79	43	33	18
" admitted a 3rd time	50	26	2	7	2
" " 4th "	17	10	1	3	2
" " 5th "	11	8	2	0	0
" " 6th "	5	4	1	0	0
" " 7th "	5	2	2	0	0
" " 8th "	2	1	0	0	1
" " 9th "	1	0	0	1	0
Cases aggregate	1318	534	241	278	141

they have not only had the most perfect knowledge and recollection of all the relations they stood in towards others, and of the acts and circumstances of their lives, but have in general been remarkable for subtlety and acuteness."

Erskine knew perfectly well, as matter of fact, that persons, truly and fully answering to the requirement of law—namely, being "wholly deprived of understanding and memory"—not knowing what they are doing any more than infants, than brutes, or wild beasts," scarcely ever appear in any court whatever. He says, indeed, "these cases are not only extremely rare, but never can become the subjects of judicial difficulty. In other cases, reason is not driven from her seat, but distraction sits down upon it along with her, holds her trembling upon it, and frightens her from her propriety," an admirable and strikingly characteristic portrait of the malady, at least in one of its forms. (See more in "State Trials," vol. xxvii., Hadfield's Case.) I shall again and again have to trace the same features without dread of rebuke.

- * 1. Of the Maine Insane Hospital, at Augusta, for 1853.
- 2. Of the Massachusetts Lunatic Hospital, at Worcester, for 1853.
- 3. Of the New York Insane Asylum, at Utica, for 1853.
- 4. Of the Bloomingdale Asylum, New York City, for 1853.
- 5. Of the New Jersey Lunatic Hospital, at Trenton, for 1853.
- 6. Of the Pennsylvania Hospital for the Insane, near Philadelphia, for 1853.
- 7. Of the Pennsylvania State Hospital, at Harrisburg, for 1853.
- 8. Of the Western Asylum of Virginia, at Staunton, for 1853.
- 9. Of the Ohio State Asylum, at Columbus, for 1852 and 1853.

Of these, 71 were homicidal, and 129 suicidal; yet no accident has ever occurred from either of the former, and but two of the latter have destroyed themselves at the asylum. One of the homicidal men, removed from the institution against the advice of its officers, killed a man with an axe, in September, 1853.

Another wing for female patients is to be added to the establishment.

2. The *Massachusetts State Lunatic Hospital* went into operation in 1833. Under the energetic executive guidance of the late Dr. S. B. Woodward, it soon became very extensively known; and it has generally been esteemed, even to a comparatively recent period, not only as one of the best conducted, but also as one of the best constructed establishments of the kind in the country. But its Trustees now assert, in their report prefixed to that of Dr. Chandler, that it "has not only ceased to be regarded as a model institution, but it has fallen into the rear-rank in the march of improvement." The halls are "low-studded, being only eight and a half and nine feet high. They are warmed by furnaces, which are very dangerous, and now nearly worn out. Their ventilation is so imperfect as not to deserve the name. The frequent occurrence of erysipelas is but one of the indices" of these defects. "There are forty-eight strong-rooms, or cells, nearly all of them constructed of solid masonry, with iron doors." Some of them "are totally unfit for human habitations. There is an entire want of suitable yards (airing courts) connected with the buildings."

For these reasons, the Trustees, after having visited twenty-six public institutions, ten of them for the insane, in several of the States, recommend the construction of another establishment, and the evacuation and sale of that which now exists.

Let us follow these gentlemen in their tour of observation. "The Superintendents of the Lunatic Hospitals laid us under particular obligations for their generous courtesy, and the very frank and unreserved manner in which they exhibited their establishments, together with their methods of management and modes of treatment, pointing out improvements and criticizing defects. * * * No cell was found without a wooden floor, a wooden door, and plastered or ceiled walls. There is not a brick and mortar cell, with iron doors, in either of the public establishments of the great States of New York and Pennsylvania, nor in the New Jersey State Lunatic Hospital, the design of which is quite generally regarded as a model.

"In the large establishment on Blackwell's Island, containing at the time of our visit, 574 patients, but two were found locked up, and those only temporarily, for a part of the day. The Superintendent, Dr. Rawney, stated that half-a-dozen strong rooms would be sufficient for that establishment, as not more than five or six a day were ever locked up, and those only for a few hours at a time. These rooms were used as sleeping apartments, and did not differ materially, in size, form, and appearance, from the other rooms occupied by patients, except the doors, which were stronger. These remarks in reference to the strong rooms are applicable to all the other establishments visited by us. In nine hospitals out of New England, containing about 2250 patients, the number found under restraint, by being locked up, was only six. In one instance only had that restraint been continued more than two days, and that one had not exceeded a week.

"In the State Hospital, at Utica, but one person was found under restraint, and that one was confined in what they called a chicken-coop bedstead. There, they were in the process of demolishing their strong rooms, as useless. Their hospital was built some ten years after ours, and their strong rooms were comfortable apartments compared with ours, having wooden floors and plank doors, and were each furnished with a bedstead and bed.

"There are no more perfectly warmed and ventilated establishments in the country than the New York Hospital, the Pennsylvania Hospital, the New Jersey State Lunatic Hospital, the State Lunatic Hospital at Harrisburg, and the State Lunatic Hospital at Utica. In all these establishments, steam is the agent employed, and it gives perfect satisfaction. The plan at Utica, being the most recent, is believed to combine more of modern improvements than any other. The Hospital at Utica, in all its appointments, may justly be regarded as a model institution, although its ground plan, in our opinion, is inferior to that of Trenton and Harrisburg."

That the buildings of the Massachusetts Hospital are very defective as compared with those of the institutions of recent origin, there can be no doubt; but it is very evident that the Trustees have placed those defects in as bold relief as possible, by exhibiting them in the light of the broadest contrasts.

In reference to the practical application of the doctrines of Pinel, the Trustees make the following remark:—

"Dr. Tuke, being the Superintendent, and possessing the whole control, found but little difficulty in testing them in practice at the York Retreat." No "Dr. Tuke," and no man named Tuke, was ever Superintendent of that Institution. We never heard, in England, of *any* Doctor Tuke.* This is not the first time, however, that a *myth* of that name has been introduced into the profession, by persons on this side of the Atlantic. Samuel Tuke, for many years one of the Trustees of the Retreat, and well known by his publications upon insanity, was a tea-merchant, in York. Of the occupation of his ancestor, who was a member of the first Board of Trustees, we know nothing.

We now come to the report of Dr. Chandler.

	Men.	Women.	Total.
Patients in the Hospital, Dec. 1, 1852	264	268	532
Admitted in the course of the fiscal year	136	152	288
Whole number	400	420	820
Discharged, including deaths.	134	166	300
Remaining November 30, 1853	266	254	520
Of those discharged, there were cured	65	80	145
Died	21	20	41

No patients were received excepting such as were sent by order of the Courts, or by the Overseers of the Poor of towns. The Hospital was intended for a number of patients not exceeding 400; yet, at one time in the course of the year, there were 567. Of the 520 at the close of the year, 216 were foreigners; that is, not natives of Massachusetts; and of the latter number, 140 were Irish. "The Irish," says the report, "are almost invariably State paupers. Only three instances have come to my knowledge of their bills, or any part of their bills, having been paid by themselves, or by their friends."

	Men.	Women.	Total.
Whole number of patients from 1833 to 1853 inclusive	2239	2225	4464
Discharged, recovered.	994	1059	2053
Died	253	239	492†

Causes of Death.—"Marasmus, 78; consumption, 58; apoplexy and palsy, 53; maniacal exhaustion, 49; epilepsy, 45; disease of heart, 20; disease of brain, 20; suicide 19; lung fever, 18; diarrhoea, 18; erysipelas, 15; old age,

* Dr. Pliny Earle is not aware that there is a Dr. Tuke residing near London.

† In one table the report gives but 491. The number of admissions in 1835, is stated in one place as 113, in another, 119. This discrepancy affects the whole number, making it but 4458, if the 113 be correct. We have quoted from the table in which the number of each sex is given.

13; typhus fever, 11; dysenteric fever, 9; inflammation of the bowels, 8; dropsy, 8; hæmorrhage, 6; gastric fever, 5; cholera, 4; cholera morbus, 4; chronic dysentery, 4; mortification of the limbs, 3; disease of the brain from intemperance, 3; bronchitis, 3; hydrothorax, 3; congestive fever, 2; convulsions, 2; land scurvy, 1; concussion of brain, 1; disease of the bladder, 1; fright, 1; rupture, 1; asthma, 1; cancer, 1; pleurisy, 1; jaundice, 1; chorea, 1."

Dr. Chandler gives a table, in which 406 of the patients who died are included, showing the relationship of insanity to longevity. Its substance is as follows:—

	Years.	Months.	Days.
Average age of 201 males when attacked	42	8	10
Average age of 205 females when attacked	39	1	10
Average age of the whole number, 406	40	11	1
Average duration of insanity before admission, 201 males	4	2	9
Average duration of life after admission, 201 males	1	9	24
Average duration of life after the attack, 201 males	6	0	3
Average duration of insanity before admission, 205 females	3	3	6
Average duration of life after admission, 205 females	1	7	29
Average duration of life after the attack, 205 females	4	11	5
Average duration of life after attack of the whole number, 406	5	5	20
Average age at death, 201 males	48	8	13
Average age at death, 205 females	44	0	15

"The chance of life," says the report, "for persons in health at corresponding periods, as calculated and acted upon by life-insurance companies, is four times greater than is here exhibited for the male, and more than five times greater for the female. This shows pretty conclusively that insanity, when not recovered from, tends to shorten life."

3. The movement of patients at the *New York State Asylum*, in course of the fiscal year ending November 30, 1853, was as follows:—

	Men.	Women.	Total.
Patients at the commencement	215	210	425
Admitted	251	173	424
Whole number	466	383	849
Discharged, including deaths	227	176	403
Remaining at end of the year	239	207	446
Of those discharged, there were recovered	95	74	169
Died	19	20	39

Deaths from phthisis, 11; exhaustion, 7; general paralysis, 5; epilepsy, 3; exhaustive mania, 2; apoplexy, cerebral effusion, tumour of brain, pericarditis, hypertrophy and dilatation of heart, typhoid fever, dysentery, chronic diarrhœa, phlegmonous erysipelas, erysipelas from wounds received prior to admission, contusions received before admission, 1 each.

"The seven cases reported as having died of exhaustion, were wasted by disease or vicious habits. Three of them, at the development of mania, had been purged, blistered, and profusely bled, and were brought to the Asylum on beds. This injudicious treatment cannot be too strongly condemned. The recuperative powers in these were so far exhausted, that no amount of care, stimulation, and nutrition could arouse them. It may be proper to state that a number of persons received in a state of extreme feebleness, after long nursing, watchfulness, and free stimulation, recovered."

"No case of suicide has occurred for more than two years."

The number of men admitted was greater than in any preceding year; that of women was diminished by an inability to receive them, on account of the extensive alterations in their department, necessary for the introduction of the new apparatus for heating and forced ventilation. Sixty applications were rejected, and forty-seven incurable cases discharged, to make room for curables.

In eleven of the cases admitted, the insanity was complicated with epilepsy. "In six of them, epilepsy came on at puberty, preceded the derangement, and was the exciting cause. In others, the epilepsy commenced in childhood, and early induced dementia. In the table of causes, two of these cases are put down to the intemperance of the father, the father being represented as in a state of beastly drunkenness most of the time for a few years previous to their birth. Nine of the whole number of epileptics had a drunken parentage, and, in some, this vice extended several generations back."

Of seven cases in which the mental disorder was accompanied by general paralysis, six were of intemperate parentage, and three of the six "had a drunken and licentious ancestry." In fourteen patients, ten men and four women, the insanity is ascribed to "spiritual rappings."

"No epidemic prevailed during the year. One case of variolous disease appeared in May, which was immediately isolated, and the entire population of the house vaccinated, after which no other case occurred. This was a case of acute dementia, of eight months' standing and seven months' residence. *The mental affection entirely disappeared simultaneously with the full eruption of the disease.*"

There may be imprudent haste, as well as unwise delay, in regard to the removal of insane persons to the institutions devoted to their treatment. Especially is this true when the removal involves a long and wearisome journey, which the patient, disabled by physical disease or debility, is unqualified to bear. A woman mentioned in this report, while labouring under acute puerperal mania, "was brought from a distant State, *a journey of eight hundred miles, THREE WEEKS AFTER DELIVERY*, and was wasted to a skeleton, and not able to speak when received. She had not taken food or drink for four days, nor slept for seventy-two hours." If any reader should have a doubt as to the result of this case, he may remove that doubt by referring to the report.

In the record of general results already quoted, it will be perceived that 169 cases are reported as "recovered." In a subsequent and more specific table, these recoveries are arranged under two heads,—viz., "Well," and "in usual health." Of the former there are 126, and of the latter 42. Our former notices of the reports from Utica have given Dr. Benedict's reasons for this distinction. A similar method of reporting is adopted in some of the German institutions. It is probably a more accurate method than that which is the most generally in vogue.

As the results of the industry of the female patients and attendants, it is stated that they repaired all the clothing and bedding, and made 5760 garments and articles of domestic use. The tailors' shop produced 60 coats, 149 vests, and 205 pantaloons; and the carpenter's shop, numerous articles of household furniture.

Aggregate of patients, from Jan. 16, 1843, to Dec. 1, 1853	3923
Discharged, recovered	1625
Died	446

4. From the general statistics of the *Bloomington Asylum*, we abstract the following:—

	Men.	Women.	Total.
Number of patients, Jan. 1, 1853	52	67	119
Admitted in course of the year	73	62	135
Whole number	125	129	254
Discharged, including deaths	69	61	130
Remaining, Dec. 31	56	68	124
Of those discharged, there were cured	21	28	49
Died	13	9	22

Deaths from typho-mania, 4; chronic mania, 4; abscess in the brain, 3; epilepsy, 3; *paralysys générale*, 3; puerperal mania, 2; mania-à-potu, 1; apoplexy, 1; serous effusion within the cranium, 1; pleurisy, 1.

Seven of the patients died within one week after admission.

The subjoined extract presents the views of Dr. Brown in regard to the numerical method as applied to insanity:—

“The terms *recovered*, *improved*, and *not improved*, as used in reports of this character, must necessarily be in some degree indefinite in their signification; they represent only the *opinion of the reporter* on the cases embraced in the opposite numerals. That this opinion will be determined, or modified by the observer’s temperament, is a fact so well known to those familiar with the subject that the ‘statistics of insanity’ are very generally regarded as collections of individual opinions, rather than as reliable scientific data. With the sincerest desire to arrive at entire accuracy, it is not unfrequently difficult to determine the exact state of the mind at the moment of the patient’s discharge. While, in one instance, we may be discomfited by the sudden relapse and return of one dismissed as convalescent, our chagrin may be smoothed by the assurance that another, whose removal we had strongly resisted as imprudent and critical, has progressed to complete restoration. It may even be somewhat questionable whether that degree of improvement which justifies enrolment among the ‘recovered,’ can, in every case, be adequately determined as the patient is leaving the asylum, as yet unsubjected to the test of association with the world, and unexposed to influences which may have produced his disease.

“The marked contrariety of opinion as to the justice of characterizing certain phases of a still existing malady as an *improvement*, may well qualify confidence in the numerical method of estimating results of treatment in mental diseases. The subsidence of agitation, noisy declamation, and violence, followed by a prolonged period of calm, does not necessarily indicate a better condition of mind; nor do improved physical health, and discontinuance of bad habits, invariably point toward recovery. Yet, each of these supposed changes is desirable as an improvement on its antecedent state, and while some physicians *exclude* from the class of *improved* all cases in which an approach towards recovery from the mental derangement be not apparent, others with equal respect for truth, *admit* all in which the above-named desiderata are attained.”

So fully have we concurred in the opinions advanced in the paragraph last quoted, that, for several years, in making our extracts from the statistics of the reports, we have entirely omitted those under the heads, “much improved,” and “improved.” That the temperaments of the superintending physicians of the various asylums differ, it is reasonable to suppose; and that the judgment of each physician is somewhat influenced by his specific temperament, is a proposition which will not be contested by any person much versed in physiology and psychology. But, that this influence is sufficient to destroy our confidence in the statistics of *cures*, reported agreeably to a sincere conviction of truth, we cannot believe. If it be, the sooner the practice of reporting them is discontinued, the better will it be for the progress of true science.

There is much truth, as well as appropriateness, in the following remarks near the close of the report before us:—

"We have been too prone to regard the *balance sheet*, the *farm account*, and the *report of articles manufactured* as matter of special solicitude, contemplating the patient as an agent in the industrial hive, rather than as the object of all the accumulated means of treatment. In the lunatic hospital, as in society and in the State, the individual must be prominent. The very disease for which he is admitted tends ultimately to destroy individuality. For this reason his identity must be preserved, his just claims recognised, his self-respect encouraged, and his mind incited to useful or refining occupation. In this kind of moral treatment, some of our co-labourers of the Old World excel us. To emulate their merit, we need a courageous zeal which shrinks from no obstacle, a generous enthusiasm that waits not to weigh restored minds against a diminished credit balance, and the stimulating conviction that laurels yet ungathered line the steeps above us."

Large additions to the "lodges" of the Asylum have recently been erected, and the new method of heating, in connexion with a forced ventilation, introduced into those buildings. The number of applicants for admission into the institution is greater than the means of accommodation. In 1836, there were upwards of 160 patients. The departments now occupied by patients are at least fifty per cent. more extensive than at that time; yet Dr. Brown proposes to limit the number, in future, to 150. This recognition of the importance of sufficient room is one among many evidences of improvement.

	Men.	Women.	Total.
5. By the report of Dr. Buttolph, it appears that the number of patients in the <i>Asylum at Trenton</i> , Jan. 1, 1853, was	91	91	182
Admitted in course of the year	56	63	119
Whole number	147	154	301
Discharged, including deaths	49	47	96
Remaining January 1, 1855	98	107	205
Of those discharged, there were cured	27	26	53
Died	10	7	17

Deaths from general exhaustion, 4; consumption, 3; epilepsy, 3; apoplexy, 4; congestion of brain, 1; congestion of lungs, 1; chronic diarrhœa, 1.

The patients enjoyed "a remarkable exemption from all acute and epidemic diseases" throughout the year.

The liberal donation from Mr. Randolph, mentioned in the last preceding report, has been devoted to the construction of an octagonal stone building, thirty-two feet in diameter, lighted from the top, and surrounded by a portico eight feet in width. The interior will be finished in a style appropriate for a handsome reading-room and museum.

	Men.	Women.	Total.
Patients admitted from May 15, 1848, to Dec. 31, 1853	320	314	634
Discharged, recovered	108	106	214
Died	36	35	71

To this brief report are appended the "Propositions relative to the construction of Hospitals," and those "On the organization of Hospitals," which have been issued by the Association of Medical Superintendents of American Institutions for the Insane. Had that Association achieved no other good, the production of these two documents would alone have been a sufficient recompence for all its labours. In future, should there be a hospital for the insane erected and put in operation, with the imperfections of those which were established twenty years ago, it will not be for the want of available means for their prevention.

6. The report of Dr. Kirkbride, for 1853, furnishes the following statistics

of the movement of the inmates of the *Pennsylvania Asylum for the Insane* in the course of the year :—

	Men.	Women.	Total.
Patients, December 31, 1852			215
Admitted since that time			191
Whole number	205	201	406
Discharged, including deaths	93	78	171
Remaining, Dec. 31, 1853	112	123	235
Of those discharged, there were cured			88
Died	10	5	15

Deaths from acute mania, 4; softening of the brain, 3; exhaustion from long-continued refusal of food, 2; tubercular consumption, chronic inflammation of the lungs, chronic diarrhœa, disease of the bladder, sloughing of the perineum, and old age, 1 each.

Of seven patients prematurely removed from the hospital, five were believed to be curable.

	Men.	Women.	Total.
Patients admitted since the opening of the hospital	1299	1099	2398
Single	708	427	1135
Married	536	530	1066
Widowed	55	142	197
Cured	622	515	1137
Died	142	103	245

Insanity commenced before the patient was 10 years of age, in 5; between 10 and 20 years, in 282; 20 and 30 years, in 915; 30 and 40, in 577; 40 and 50, in 290; after the fiftieth year, in 229.

During the whole of the past year, "the institution has been rather more than comfortably filled, the average number being 229, while 220 is regarded as the capacity of the building." The highest number was 248. Some applications for admission were refused. The elaborate system of moral management heretofore pursued at this hospital, and pretty fully described in our previous notices of the reports emanating from it, is still continued. We still await, however, the introduction here, as well as at all the other similar establishments in the United States, of one feature in the general treatment, without which it is believed that no institution for the insane can be perfect. We allude to an active, thorough, energetic system of disciplinary, gymnastic, hygienic, physical and mental improvable and curative management of the chronic cases—even of those who may have been more or less demented, torpid, and stupid, and perhaps given up as incurable, for years. In short, a school for idiots, technically speaking, is needed in every large institution for the insane. We have wonderful results from those schools in Germany, Switzerland, France, England, and, to some extent, in this country, where the subjects were congenitally imbecile. We anticipate success no less eminent among those whose dementia is acquired, for we are fully convinced that the physical lesion to be overcome is, in a large proportion of cases, a less discouraging obstacle in the latter than in the former. All things, and especially the *power*, by his facilities for the acquisition of the means, point out Dr. Kirkbride as the man to become the pioneer in this undertaking. The hospital under his superintendence already approximates so nearly to perfection, that there is some danger of his becoming the Alexander of his sphere, and weeping that there are no more realms to conquer. But while among his patients, one imbruted remnant of that which was once a man, moves only in obedience to the calls of nature, and of his attendant, perhaps to the latter alone, everything is not accomplished. While along the benches, or on the floors, in corners or partially secluded nooks, lying, sitting, crouching, or standing in listless inac-

tivity, are those who still bear some relic, how slight soever it may be, of their former intellectual manhood, so long will the necessity be indicated for that systematic physical and mental schooling, which has been mentioned. Be it understood that we are pointing to an entirely new era in the history of our institutions specially devoted to the insane; an era within the first gleams of the aurora of which we have been brought by the progress of the last half-century. We believe, that at the present time, the class of patients in question receive no more efficient treatment in any of our Asylums, than in the Pennsylvania Hospital; and we have alluded to them there by partial description, only because we know that such a class exists, and, but too often, a very numerous class, in every establishment of the kind.

Among the important improvements of the past year, mentioned in the report before us, is a serpentine carriage-road through the pleasure-grounds of the department for females. A similar road is in progress through the grounds devoted to the men. When the latter is completed, a drive of one mile and three-quarters can be taken within the walled inclosure of the Hospital.

Gas has been introduced, for lighting the buildings, and, with three times the amount of light formerly furnished by oil, the actual expense is less.

Dr. Kirkbride devotes several pages to the discussion of the question whether insanity be increasing in a greater ratio than the population. "It is not difficult," he remarks, "to understand that there may be elements in operation in this country more likely to produce mental derangement than in most others; but at the same time, it must also be conceded that other causes, elsewhere prevalent, are here absent; and which, different as they are in their general character, tend to produce nearly the same effects. While the general prevalence of comfort among our own population, the comparative ease with which nearly every individual may earn a livelihood, and the absence of tyranny and a grinding oppression of the poor and dependent, ought to contribute no less to the mental than to the physical well-being of the whole community; still, some of the characteristic traits of our people, originating in this happy state of things, tend to a different result. The very active and wide-spread commercial speculations of our citizens, the incessant taxing of the mental and physical powers to their utmost, the absorbing pursuit of business, aiming at rapid success and the hasty accumulation of wealth, is a state of constant mental anxiety, of labour without relaxation; and it is too often a mere lottery, in which great and sudden good fortune is the exception, and loss and disappointment the more common, though less noted results." The man of business, when able to retire, is unfitted for the change; "he discovers, with surprise, that long habit has rendered the excitement, the toil, and the anxieties of business, great as they may have been, among the necessities of his existence; and irksome as he may occasionally have found them, he now concludes that they are infinitely preferable to the *ennui* which presses so heavily upon him. Fortunate is the man thus situated, who can take a hearty, permanent interest in other pursuits, who can engage in works of benevolence or of public utility that will render him not only a benefactor to his species, but will also preserve him from an indulgence in habits that may ruin him physically, and from yielding to feelings which may seriously impair the functions of the mind." After mentioning other causes, the conclusion is arrived at, that, "it will probably be found that the number of cases (of insanity) among us has *not* increased in a greater ratio than that of the general population." The greater prominence, during the last few years of the subject of insanity, and of *its* subjects, is mentioned as only an apparent, not a real indication of the increase of the disease. The filling up of the hospitals, also, "does not prove that insanity increases more rapidly than the population." "Philadelphia, in 1830, had accommodation for 385 insane, with a population of 188,961. At the end of 1840, with a population of 258,037, she could provide for about 530, and now, with half

a million of inhabitants, her different institutions can receive 630 patients." Thus, in regard to that city, the provisions for the cure of the insane have not kept pace with the population.

But further accommodation is needed, and hence Dr. Kirkbride suggests, "that a new Hospital, replete with every modern discovery, and all the improvements suggested by a large experience, and capable of accommodating 200 male patients, should be erected on the seventy acres of land now comprising the farm of this institution, and directly west of its present inclosed pleasure-grounds; while the present buildings, with everything included within our external wall, should be given up for the exclusive use of a similar number of females."

7. We glean from the report of Dr. Curwen, the subjoined sketch of the movement of the population of the *Pennsylvania State Hospital*, in 1853.

	Men.	Women.	Total.
Patients in the Hospital, Dec. 31, 1852 . . .	59	47	106
Admitted in course of the year . . .	95	68	163
Whole number . . .	154	115	269
Discharged, including deaths . . .	55	32	87
Remaining, December 31, 1853 . . .	99	83	182
Of those discharged, there were cured . . .			27
Died . . .			17

Causes of Death.—Epilepsy, 5; exhaustion consequent to chronic mania, 5; paralysis, 3; "disease of the lungs," 2; acute inflammation of the brain, 1; gradual decay of the vital powers, 1.

"The general health of the household has been good. We have been spared the visitation of any epidemic, and only a few cases of disease incident to the season were under treatment during the summer and autumn." "Several of those who were much improved at the time of their removal, subsequently regained their former mental vigour." "A little girl, three years and four months old, evincing unequivocal symptoms of mental disorder, was admitted in the early part of the year. The mental disorder was recent. This case, so interesting on account of the age and mental peculiarities, still continues under treatment."

In the table of supposed causes we find the following: "Millerism, 1; spiritual rappings, 1; religious excitement, 2."

Small libraries have been established in some of the wards. "Pictures of a cheerful character hung on the walls, and mottoes suggestive of pleasant ideas, and printed in large letters, have been introduced into the wards, more particularly of the excited classes." The donations from Philadelphia, collected by Miss Dix, and mentioned in our notice of the report for 1852, amounted to \$5182. "The museum and reading-room buildings have been finished. They are 42 feet long, by 25 feet wide. A portico runs nearly the whole length of the front, from which a very pleasant view is obtained. They are placed one on either side of the front of the building; and each is easily accessible from the wards of the sex for which it is intended. It is proposed, so far as can be done, to procure the mineral and geological productions of the different parts of the Commonwealth, and to give to each county so much room as may be needed to exhibit the specimens obtained."

8. In the twelve months preceding the 30th September, 1853, the number of patients at the *Western Asylum of Virginia*, exceeded, by twenty-two, that of any preceding year. No malignant or epidemic disease occurred among them; neither was there a case of suicide. Of the 1264 patients received since the opening of the Asylum, only five have terminated their existence with their own hands. In two of these there was no certainty that the death was not accidental.

	Men.	Women.	Total.
Patients at the beginning of the year	202	138	340
Admitted in course of the year	69	51	120
Whole number	271	189	460
Discharged, including deaths	54	29	83
Remaining at the end of the year	217	160	377
Of those discharged, there were cured	26	15	41
Died	17	10	27

The diseases terminating fatally are not reported. Among the causes of insanity, we observe that the "excessive use of tobacco" is mentioned in *three* of the cases, "inhaling tobacco fumes" in *one*, and the "excessive use of tobacco and ardent spirits" in *one*.

Of the 460 cases, the insanity *commenced* before the age of 20 years, in 67; between 20 and 30, in 160; between 30 and 40, in 93; between 40 and 50, in 50; after the fiftieth year, 18; unascertained, 72. The great preponderance of the decennium from 20 to 30 years will be perceived.

	Men.	Women.	Total.
Aggregate of patients admitted since July 1, 1836	711	474	1185
Discharged, cured	270	184	454
Died	150	86	236

Aside from the statistical tables, the report of Dr. Stribling is almost exclusively occupied in the description of improvements recently made upon the premises, and the suggestion of others. Gas was introduced for the purpose of lighting the apartments, on the 1st of January, 1853. "We are now satisfied," says the report, "that the institution can be supplied from the gas-works with an amount of light far greater than that which it formerly derived from oil, lard, and candles, *for a small fraction of what these materials cost.*"

As this establishment and the Eastern Asylum can accommodate but about 700 patients, and as there are within the State, according to the last census, 922 insane whites, and 945 white idiots, many of the latter probably not congenitally idiotic, the Doctor urges upon the Legislature "to make at once a liberal appropriation for the erection of another Asylum" for 250 patients.

9. On the 1st of July, 1852, Dr. S. Hanbury Smith retired from the superintendence of the *Ohio Lunatic Asylum*, and was succeeded by Dr. Elijah Kendrick. The reports heretofore emanating from this institution have been more voluminous than those from any other similar establishment in the country, with perhaps a single exception. The one now before us is of more restricted limits.

	Men.	Women.	Total.
Patients in the Asylum Nov. 15, 1851	150	151	301
Admitted in course of the fiscal year	149	126	275
Whole number " " "	298	277	576
Discharged, including deaths	169	147	316
Remaining, Nov. 15, 1852	130	130	260
Of those discharged, there were cured	70	71	141
Died	37	21	58

Deaths from consumption, 13; diarrhœa, 8; dysentery, 8; epilepsy, 4; marasmus, 4; maniacal exhaustion, 4; typhoid fever, 4; gastritis, 2; anæmia, 2; inanition, 2; suicide, 2; apoplexy, organic lesion of brain, caries of vertebra, typhoid pneumonia, and erysipelas, 1 each.

Of the cases admitted, the mental derangement of 22 is ascribed to "religious anxiety," and that of 26 to "spirit rappings." In the latter class, Dr. Kendrick remarks, that "the suicidal tendency is especially prominent, while the constant resting of the thoughts upon the scenes of an imaginary world renders it more difficult to attract attention to those of the real. Such cases,

though recent, have proved more unfavourable than many others of the same class.

Thirty-eight of the patients received had previously been inmates of the Asylum, and discharged *recovered*. *Sixteen* of them had been absent less than a year. When will the physicians of all our institutions for the insane report this item of their statistics?—an item of more importance than many which they regularly place before us.

Of the 275 persons admitted, the insanity commenced before the age of 20 years in 45; between 20 and 30 years, 94; 30 and 40 years, 65; 40 and 50, 41; 50 and 60, 23; 60 and 70, 6; 70 and 80, 1.

From the fact that one hundred and fifty-one applications for admission were rejected in the course of the year, we infer that Ohio is beginning sorely to feel the want of another hospital.

The bodies of deceased patients not reclaimed by their friends, have heretofore been privately interred. The funerals are now conducted openly, and in the presence of many of the patients. The circumstances which induced this change, and the results of the experiment, are thus related:—

“On a visiting tour through the grounds, my ear caught the following dialogue between two patients at work. Said A.: ‘What disposition do you suppose is made of our bodies after death here?’ B. replied: ‘In my opinion, the doctors boil us up.’ ‘Very true,’ continued A., ‘that may be the fate of some; but my opinion is, that many of us are taken to doctors’ shops, so have our bones picked and stuck up to view as our bodies are here.’ From that moment I was resolved, if possible, to dispel this mental delusion. Accordingly, on the first occurrence of a death, the chaplain, the officers, and assistants, accompanied by many of the male patients, followed the deceased to his final resting-place. Here they were addressed by the chaplain, in language chaste and appropriate, in every way calculated to convince their understanding that not only were they fed, clothed, and cared for during their lives, but that, at their deaths, they should not be forgotten. The effect was strikingly impressive.

“In this first experiment we realized our highest hopes. Many who were denied the privilege, reproached us for not having permitted them to unite with their friends in rendering the last tribute of respect to a departed fellow-sufferer. We still observe all the rites and ceremonies due and proper on such occasions; take out at all times a large number of patients, both male and female, and nothing indecorous or disorderly has yet transpired to interrupt the practice. So far as we are capable of judging, the influence has been salutary and controlling.”

Dr. Kendrick does not give a very flattering description of the condition of the buildings in regard to the facilities for promoting the comfort and restoration of the inmates. The water-closets and bathing apparatus, “in plain terms, are a disgrace to the institution.” There are no means of forced ventilation, and the patients’ “sleeping apartments are not warmed.” He recommends an appropriation of \$33,800 to remedy these and other defects.

Report for 1853:—

	Men.	Women.	Total.
Patients remaining Nov. 15, 1852 . . .	130	130	260
Admitted in course of the fiscal year . . .	110	129	239
Whole number “ “ “ “ . . .	240	259	499
Discharged, including deaths . . .	125	122	247
Remaining Nov. 15, 1853 . . .	115	137	252
Of those discharged, there were cured . . .	71	62	133
Died . . .	12	12	24

Causes of Death.—Phthisis pulmonalis, 7; inanition, 4; maniacal exhaustion, 3; typhus fever, 2; bilious remittent fever, 1; congestive fever, 1; variola, 1;

pleuropneumonia, 1; paralysis, 1; ulceration of bowels, 1; exhaustion from journey, 1; suicide, 1.

A case of smallpox was "developed, under most inexplicable circumstances, in the male department," and every precaution was taken to prevent the propagation of the disease among the patients. No other case occurred until two months afterwards, when a female patient was attacked, had the disease mildly, and recovered. An endemic fever, of a mixed character, commenced among the inmates about the middle of July, attained its height about the middle of August, and continued, "sporadically," to the time at which the report was written. "Though commencing as a common bilious remittent, owing to the hospital tendency, after the first few days it assumed the typhoid or typhous type; and again, in the case of convalescents, at the end of two weeks, re-assumed the remittent form. Among the patients there were 31 cases." These were mostly of males, and one of them ended fatally. There was, also, one case of congestive fever, of which the patient died. Of the 31, "through the renovating influences of physical disease, and the necessary remedial agents used for their recovery, 13 were restored to reason concurrently with their convalescence from the fever. Several were also much improved mentally, but again relapsed. In all the cases, even in the demented, the mind seemed more clear during the attack than when in usual physical health."

Sixteen cases of the fever occurred among the employées of the institution, one of them terminating in death. Dr. Kendrick attributed the disease to malaria rising from the "illegally constructed sewers and most offensive cesspools," and from the earth thrown up in digging numerous ditches for steam and water-pipes through "the sub-soils charged with the accumulated impurities of years." The disease was treated, in its early stage, with alteratives, aperients, and diaphoretics; when typhoid symptoms arose, by the addition of tonics and stimulants, and, upon the re-assumption of the remittent type, by anti-periodics and tonics.

Of the 239 patients admitted, 68 had suffered from former attacks of insanity. Among the "probable causes" of the disease, "religious excitement" ranks the highest in numbers, 32 being assigned to it. It is evident that the etiology of the disease is differently viewed by different physicians. Dr. Stokes, of the Mt. Hope Institution, asserts, in one of his late reports, that he has never seen a case clearly traceable to the cause in question. Eleven cases are attributed to "spirit rappings." "For some of these," says Dr. K., "my sympathies have been strongly awakened, and, though deprecating the impious folly, I cannot refrain from here entering my feeble protest against the indiscriminate commitment of such persons to lunatic asylums." He then quotes some medico-legal remarks of such tenor as to lead the reader to the inference that, in some of the patients alluded to, there was no delusion or insanity, other than that which might exist in regard to the so-called "spiritual manifestations."

Forty-eight of the patients admitted had the suicidal propensity. Thirty-five of them had attempted self-destruction. Of the thirty-five, thirteen had recovered from their mental disease at the close of the year.

	Men.	Women.	Total.
Whole number of patients, 1839 to 1853, inclusive	1220	1135	2355
Discharged recovered	601	570	1171
Died	188	135	323

Diseases which proved Fatal.—"Exhaustion and general decay, without discoverable local lesion, 56; consumption, 52; dysentery, 31; diarrhœa, 30; epilepsy, 28; fever, 28; inanition, 26; apoplexy, 16; palsy, 9; inflammation of the lungs, 7; dropsy, 6; inflammation of the brain, 4; inflammation of the liver, 3; chronic inflammation of the peritoneum, 3; tabes mesenterica, 3; sui-

cide, 3; inflammation of the pericardium, 2; inflammation of the stomach, 2; erysipelas, 2; organic lesion of the brain, 1; caries of the vertebræ, 1; chronic inflammation of the bronchia, 1; bilious colic, 1; ulceration of the bowels, 1; inflammation of the kidney, 1; cancer of the womb, 1; cutaneous cancer, 1; gangrene of the face, 1; exhaustion from journey, 1; confluent smallpox, 1; cause not assigned, 1."

The State Legislature has made appropriations for warming the buildings by steam, in connexion with forced ventilation, and for the construction of an infirmary.

GREAT WILL CASE.

DYCE SOMBRE *v.* TROUP.

THIS was a business of proving, in a solemn form of law, the last will and testament, with a codicil thereto, of David Ochterlony Dyce Sombre, Esq., formerly of Sirdhana, in the Upper Provinces of Bengal, in the East Indies, and late of Paris, dated respectively the 25th of June, 1849, and the 13th of August in the same year, and which was originally a business of granting letters of administration, on the suggestion that he had died intestate, promoted by the Hon. Mary Ann Dyce Sombre, widow of the deceased, against Ann May Troup, the sister and next of kin of the deceased, and also against Henry Thoby Prinsep, Esq., one of the executors named in the will.

The documents were propounded in a special allegation, which pleaded that the testator was born at or near Sirdhana, in or about 1808; that his father was of Asiatic extraction, and for some time a colonel in the service and an officer of the household of the Begum Sombre, a princess who exercised rights of sovereignty over a territory in Hindostan; that his mother was the granddaughter of General Sombre, who had been the husband of the Begum Sombre, or who had cohabited with her as such, but who died in her lifetime; that the deceased was, while an infant, adopted by the Begum Sombre, who brought him up in her own palace, and treated him in all respects as her own son; that on the completion of his education, which he received partly under the superintendence of a clergyman of the Church of England, he was admitted by the Begum Sombre to take part in the arrangement of her affairs, and was consulted by her thereon; that, finally, he acquired great power and authority within the territory of the Begum, and continued to exercise the same until her death, which happened in January, 1836; that Mrs. Troup was a natural and lawful sister of the deceased; that Madame Solaroli was also a child of his father, but whether the issue of his mother or of some one else, as frequently asserted by the testator, was unknown to Mr. Prinsep; that Mrs. Troup and Madame Solaroli were also adopted by the Begum, who gave each of them valuable presents on their marriages, which took place on the same day; that the Begum, by her will, dated 1831, after bequeathing several legacies, gave the residue of her real and personal estate to the testator, and requested him to assume the name of Sombre, which he did; that having wound up and settled the affairs of the Begum in the early part of 1838, the deceased came to England; that before leaving the East Indies he placed in the hands of trustees 13,000*l.* to pay the interest to Mrs. Troup for life, and apply the principal at her death for the benefit of her children, and also 10,000*l.* on the same conditions for the benefit of Madame Solaroli; that previously to leaving the East Indies he declared that it was his intention, in accordance with what he knew to have been the desire of the Begum, to bequeath the bulk of the property which he had acquired from her to the East India Company, for the purpose of founding a college for the upper classes of natives, or for some

similar purpose, and that he executed a will to that effect which could not now be found; that although he had to some extent received an English education, so as to be in a measure acquainted with the manners and habits of Europeans, yet he was strongly imbued with the feelings peculiar to the natives of oriental countries with respect to the treatment, demeanour, and conduct of women, and retained such feelings, amounting occasionally to fits of uncontrollable passion and jealousy, to the time of his death, and that he was naturally of an irritable and suspicious temperament; that in 1838 he became acquainted with his present widow, a daughter of Viscount St. Vincent, and in the following year made proposals of marriage, which she accepted; and on one occasion the engagement was broken off, but on the 26th of September, 1840, they were married; that he was at the time as well as at all periods prior thereto, of sound mind; that by a settlement in contemplation of the marriage, he transferred to trustees the sum of 133,333*l.* 6*s.* 8*d.* Three per Cent. Consols, to pay the dividends to himself for life, and after his decease to Mrs. Dyce Sombre for life, and in failure of issue of the marriage to his heirs and assigns; that the indenture of settlement was prepared by Mr. Frere, the solicitor who acted for the testator, for Mrs. Dyce Sombre, and for her father; that the indenture was submitted to the testator for his approval, but it was never read over to or by him before its execution; that there was no provision that the benefit taken by her should be accepted in satisfaction of all dower and thirds to which she might become entitled out of his estates as his widow, and that he was not aware of such omission until it came to his knowledge in consequence of certain proceedings in Chancery; that upon being made acquainted therewith he became greatly displeased thereat, and frequently complained that he had not had proper legal advice from the solicitor on the subject; that after the marriage the parties travelled together on the continent, and on their return to England in December, 1840, took up their residence at the Clarendon Hotel, Bond-street; that in January, 1842, Dr. Chambers, who had attended the testator in respect of his bodily health, was consulted by Mrs. Dyce Sombre as to the state of his mind, and, at her suggestion, or with her assent, Dr. Sutherland was called in; that he was frequently visited by those two physicians up to December, 1842; that in February, 1843, Sir James Clark was consulted by her, and he was afterwards assisted by Dr. Conolly and Dr. Monro; that about the 30th of March that year it was finally agreed that he ought to be placed under restraint, and a keeper was appointed to take charge of him; that a commission of lunacy having been procured on the 31st of July following, he was found to have been of unsound mind from the 27th of October, 1842; that the principal portion of the evidence submitted to the jury on the part of Mr. Dyce Sombre, referred to certain insane delusions entertained by him respecting the conduct and behaviour of his wife; that shortly after he had been found of unsound mind, his bodily health began to fail, and his medical attendants advised change of residence; that he finally went to Liverpool, and on the 21st of September escaped from the custody of his keeper and servants, and proceeded alone first to Southampton and then to Paris, where he claimed the protection of the police authorities, which was promised to be afforded him so long as he respected the laws of the country; that Mrs. Dyce Sombre being informed that he was at Paris, Mr. Frere, the solicitor, accompanied by a keeper, went there, and applied to the prefect of police, to cause him to be delivered into his custody; that such application was refused unless he should be able to produce an order to that effect from the Minister of the Interior; that on application being made to him, he directed an inquiry as to the state of mind in which the testator then was; that the testator voluntarily attended such inquiry, and submitted to an examination which lasted upwards of three hours, in the course of which various questions were put to him, founded upon instructions furnished to the prefect by Sir

James Clark and Mr. Frere; that throughout he evinced himself to be of sound mind, memory, and understanding, and the physicians present reported accordingly to the Minister of the Interior, who thereupon declined to interfere with him, or to authorize any restraint being laid on his person or movements; that the funds which he had brought with him from England being soon exhausted, he was obliged to borrow money from persons to whom he was known; that Mr. Frere, previously to leaving Paris, authorized the landlord of the hotel to advance the testator such small sums of money as might be necessary to procure food and clothing and defray any trifling expenses which might be requisite; that in November that year, Mrs. Dyce Sombre authorized Mr. Okey, counsel to the British Embassy at Paris, to examine and settle all the testator's accounts, and provide him with money for his private expenses at the rate of 10*l.* per week; that the testator, being at such time entitled to a clear income of upwards of 18,000*l.* per annum, remonstrated against the insufficiency of such allowance, whereupon Mrs. Dyce Sombre authorized Mr. Okey to honour his draughts for such money as he might require; in consequence thereof, at first, the sum of 16*l.* a week, then 20*l.* per week, and afterwards 28*l.* per week, was paid to the testator over and above his rent and tradesmen's bills, and was continued until May, 1844, when he left Paris for a time; that in January, 1844, he instructed his then solicitor, Mr. Leman, to present a petition to the Lord Chancellor, praying that all the proceedings against him under the commission of lunacy might be superseded, but the petition was dismissed, after hearing counsel, on the 8th of August that year; that in the following December the Lord Chancellor confirmed a report made by Mr. Francis Barlow, one of the Commissioners in Lunacy, and ordered a sum not exceeding 5000*l.* per annum to be expended by the committee of the testator's estate for his maintenance and support, and allowed Mrs. Dyce Sombre 4000*l.* per annum; that, in 1845, after visiting St. Petersburg, Brussels, &c., the testator returned to Paris, where he remained until June, 1846. The allegation then went on to plead in considerable detail various proceedings in Chancery relative to the superseding of the commission, and the allowance to be made to the testator, and averred that in November, 1848, the testator applied to Mr. Prinsep, through whom he had communicated with the Lord Chancellor to recommend him a solicitor to draw up and prepare his will, and he accordingly recommended him to apply to Messrs. Desborough, Young, and Desborough, his own solicitors; that Mr. L. Desborough called upon him at his request, and had a long interview with him, when the testator referred particularly to the proceedings in Chancery arising out of the commission of lunacy, and their effect with regard to his power to make a will; that Mr. Desborough fully discussed with him the sort of evidence which would probably be required to support any will made by him at that time; that the testator at great length stated his wishes in regard to the disposition of his property, and particularly mentioned his desire to make some special provision for the retainers of the Begum, and his wish to found and endow a college for the upper classes of natives in India; that he explained that such his wish was in accordance with that of the Begum, and in compliance with a pledge that he had given; that the testator afterwards committed his instructions to writing, and about the 7th of February, 1849, forwarded the same to Mr. Prinsep, with a note at the end addressed to Mr. Desborough; that on the occasion of Mr. Desborough seeing the testator, he talked and conversed in a rational and sensible manner; that a draught of the intended will was prepared under the advice of counsel, and a fair copy forwarded to the testator at Paris, which he returned with several marginal notes and observations in his own handwriting; that the draught, having been settled in pursuance of the further instructions, was copied fair for execution, and on the 11th of June, and for several days after, Mr. Desborough, jun., conferred with the testator on the subject of his will, and of the various trusts and

provisions therein contained; that the same were repeatedly read over to and also by the testator, and were also repeatedly considered by him in the presence of Mr. Desborough, jun., on all which occasions he was of perfectly sound mind; that on the 13th of June he determined on making some addition to his will, in order to appoint a trustee to succeed him with respect to certain trust funds which the Begum had by deeds directed to be applied for religious and charitable purposes, and being unable to find the deeds, he, on the following day, from his own recollection, stated the substance and effect of them to Mr. Desborough, who wrote them down in the margin of the will; that the will, with the additions, having been despatched to London for the purpose of being revised by counsel and recopied, was sent back to Paris; that Mr. Desborough saw the deceased upon it from day to day, and, under his verbal directions, filled in the names of several legatees where blanks had been left, and substituted the senior Roman Catholic priest for the time being at Sirdhana as a trustee in the place of the testator; that after the execution of the will in duplicate both copies were left in the possession of the testator; that before the execution of the will he, at the suggestion of Mr. Desborough, sent for the subscribing witnesses, who were well known to him, and requested them to attend for the purpose of witnessing his will; that, upon one or more of the interviews which Mr. Desborough had with him, the testator spoke of his wife in a manner clearly to show that he was aware of having laboured under unfounded and delusive impressions in respect to her character and conduct, and that his mind was at such time quite free from such impressions, and that he subsequently executed a codicil to his will; that early in the month of December, 1848, being then resident at Mivart's Hotel, Brook-street, he applied to Dr. Paris, the president of the College of Physicians, and to several other physicians of eminence, among whom were some who had given their attention more especially to cases of insanity, to meet in consultation at the hotel, in order that he might be informed of their opinion as to the state of his mind; that he was repeatedly examined, and evinced himself throughout the examinations to be of perfectly sound mind, and fully competent to manage himself and his affairs; that in December, 1848, he returned to Paris, where he thenceforth continued to reside, save for short intervals of a few months at a time, when he travelled for amusement, until he revisited England in 1851, shortly before his death; that while residing at Paris he mixed in society, and was received as a visitor at the houses of his numerous acquaintances in that city, and was visited by them in return, and was always considered and treated by them as a person of sound mind; that in January, 1850, he gave instructions to Mr. Shadwell, his solicitor, to prepare a further petition to the Lord Chancellor to direct a fresh inquiry into the state of his mind, to which his Lordship acceded; but he died before the examination took place; that the several persons, all natives of Hindostan, to whom small annuities in Company's rupees were bequeathed were servants or retainers and dependents of the Begum, or of the testator, and were, during his life, in receipt of monthly pensions granted to them by the testator and paid by his agents in the East Indies; that Anthony Regheliori, a devisee and legatee named in the will, was an officer in the army of the Begum, and highly esteemed by her, and was, after 1838, when the testator left the East Indies, employed by him as his agent to manage his estates and property at Sirdhana and Delhi; that George and John Thomas, also devisees and legatees, were descendants of one George Thomas, who was formerly the head or chief, and exercised rights of sovereignty over a small territory near to that of the Begum, which, on an invasion by a hostile army, he was forced to evacuate, and thereupon took refuge at Sirdhana, where he continued to reside under the protection of the Begum, and he and his family were maintained by her; that the personal estate of the testator in England, France, and the East Indies, which was at his disposal at the time of his

decease, and which partly consisted of a balance at his bankers of 7000*l.* and upwards, amounted in value to 500,000*l.* and upwards, independently of claims upon the East India Company to a very large amount.

An allegation was then given in on behalf of the Hon. Mary Ann Dyce Sombre, in which it was pleaded that the parents of the deceased were Roman Catholics; that, after the completion of his education, the society in which he mixed was chiefly composed of the civil and military servants of the East India Company and other Europeans resident at Meerut and Delhi, with their wives and families, with whom, and especially with the ladies, he associated freely, according to English habits and manners, and that one of his most intimate friends was Dr. Drever, then attached to the Begum's household; that the deceased used the European dress, and habitually conformed from his youth to the manners and customs of English society, especially in his treatment of and demeanour to women; that he was naturally of a mild and quiet disposition, gentle and polished in his manners, conduct, demeanour, and conversation; that while in India he was remarkable for his absence of jealousy, and of the peculiar ideas and feelings of the natives of Oriental countries as to women; that he kept a mistress at Sirdhana, and afterwards at Calcutta, and often admitted Englishmen into her apartments while she was therein and was unveiled; that that was a practice wholly at variance with the feelings and habits of natives of Oriental countries with respect to women, and such as no person imbued with those feelings would have adopted; that he manifested no jealousy of her, and never had any fits of uncontrollable passion or jealousy while of sound mind; that Mrs. Troup was a natural and lawful child of the parents of the deceased, and was so treated by the Begum, and also by the testator while of sound mind, and until 1846; that he never before that time expressed any doubt as to the legitimacy of Baroness Solaroli, and spoke and wrote of both his sisters in terms of equal interest and affection; that on his arrival in England, in 1838, he was introduced into the first circles of society, and therein associated freely with ladies and gentlemen, and thenceforth, until 1841, adhered completely to English habits and manners in all respects, and never, until that period, manifested any peculiar jealousy connected with women, save only with respect to his wife; that the marriage settlement was not prepared by Mr. Frere, nor did he act as solicitor for Mrs. Dyce Sombre and her father; that he was recommended to the deceased by Viscount Combermere, who had known the deceased in India; that Mr. Frere only received full instructions from the deceased, and that the draught was submitted and explained to him by Mr. Frere; that he was not possessed of or entitled to any real estate out of which Mrs. Dyce Sombre could claim dower; that Mr. Frere fully explained to him the rights of his wife both as to real and personal estate in case of his dying without children intestate, leaving her surviving, and recommended him to make a will; that he did not, while of sound mind, express any displeasure on account of the settlement, or declare that he had not had proper legal advice from Mr. Frere; that in the spring of 1841 he for the first time became restless, low spirited, fanciful, and suspicious, and at times very much excited, and by his conduct, conversation, and demeanour, evinced, during the remainder of that year, that his mind was in a weak and disordered state; that during such period he frequently and without cause, for the first time, entertained and expressed suspicions of his wife's chastity, both before and since her marriage, and often falsely alleged that she had been abetted in her unchastity by her father and mother; that she had been an opera dancer, and had concealed the fact; that for no cause he applied opprobrious epithets to her, spoke in a loud, violent manner, used threatening gestures to her, and often suddenly, after so doing, fell on his knees before her and asked forgiveness; that at the various periods of the medical examinations referred to in the adverse allegation he laboured under an insane delusion that

his wife was habitually unchaste, and that she was frequently guilty of adultery with different gentlemen—among others with her own father; that in 1842, with his concurrence, Dr. Chambers was called in to attend him; and, without the knowledge or privity of Mrs. Dyce Sombre, Dr. Sutherland also saw him; that in March that year, without any cause or reason, on meeting Mr. Alfred Montgomery, with whom he was very slightly acquainted, and who was driving with a lady in a cabriolet, he rushed forward, and in a violent and excited manner endeavoured to stop him; that fears were entertained during such period that he would become insane, but that he slightly recovered during the summer; that in the autumn of 1842, while on a tour in Scotland, he became very unwell, and repeated his suspicious of his wife's criminality with waiters and other persons; that he frequently insisted, notwithstanding denial and explanation, that General Ventura had followed him and his wife to Stafford, and had committed adultery with her at her father's house with his knowledge and sanction; that, while at Inverness, in October, he went into his wife's room where her maid then was alone, to whom he had always before behaved well, seized her, and said she must confess all she knew of her mistress's secrets, or he would murder her; to which she replied, she had nothing to confess; that he thenceforth, and for no other reason, expressed great antipathy to her, and often called her by opprobrious names; that, while so travelling in Scotland, he on various occasions expressed his suspicions that poisons or noxious things had been put into his food, to injure him; that, while at Inverness, he wrote a letter conveying a challenge to General Ventura, on account of the supposed adulteries of his wife with him; that in the following month he sent a challenge to Mr. Montgomery; that in February, 1843, the deceased, being much irritated on account of the East India Company having finally rejected certain claims which he had in right of the Begum upon the Company, sent a memorial to the Queen resigning his claims in her Majesty's favour, and wrote a letter to Sir J. L. Lushington, who had been chairman of the Company, enclosing a copy of it, and desiring him to give him reparation by fighting a duel with him; that he also sent letters to Sir Richard Jenkins, another of the directors, containing a challenge; that in November, 1842, his conduct towards Mrs. Dyce Sombre became so violent as to occasion the greatest apprehensions that he would do her some serious bodily injury; that he would not suffer her to be out of his sight for a minute, for fear, as he said, of her committing some act of adultery in his absence; that at other times he behaved with the greatest affection towards her, and expressed regret for his misconduct; that he talked of being visited by two spirits—one of a benevolent, the other of an opposite character; one desiring him to murder his wife, and the other forbidding it, and telling him he would be happy with her at last; that he was very restless, and often laughed aloud for no reason; that in February, 1843, he called on Dr. Elliotson, to whom he was not known, and desired that the Doctor would make him have more of the company of his (the deceased's) wife, she being also unknown to Dr. Elliotson; that he expressed himself irrationally and violently towards Dr. Elliotson, and insisted on his fighting him; that Dr. Elliotson, having made inquiry respecting him, caused a remonstrance to be made to Mr. Edward Ricketts against the deceased being allowed to go at large: that in March, 1843, it having been determined by medical men, in consequence of his deranged state, to place him under restraint, if Mrs. Dyce Sombre would consent, she reluctantly gave it; that, while under confinement at Hanover-lodge, he continued to manifest the delusion that he was visited by spirits, who conversed with him, and declared that they first appeared to him when he was seven years old, under a pomegranate tree, in the form of the letter T. The allegation then pleaded in great detail a number of insane acts asserted to have been committed by the deceased, and repeated charges made by him of his wife's infidelity both before and

after he went to Paris, and averred that in 1847 or 1848 he manifested an insane delusion that the East India Company or some of the directors thereof had tampered with his wife, and had contrived or brought about her infidelity and her incestuous intercourse with her father; that in 1848, being at Rome, he had several audiences of the Pope, and entered into correspondence with Cardinal Franzoni and Dr. Grant on the subject of obtaining a divorce from his wife by reason of her adultery; that, while in London, in 1848, he corresponded and conversed with Cardinal Wiseman on the same subject; that in November that year a meeting took place between the deceased and his wife, in the presence of Mr. Martin and Sir James Clark, at which he suggested that they should come to some understanding about a divorce, and that his conduct and demeanour manifested that he was still labouring under delusion with regard to her unchastity, and also as to the illegitimacy of Madame Solaroli, having first entertained that idea in 1846; that, when at Naples, in 1848, he fancied that he was very ill, that it was occasioned by drugs which had been given to him, and that Baron Solaroli had told him that it would be done at that particular date; that on other occasions he complained of something injurious being put into his food; that at a medical examination, which took place in November, 1848, in London, he evinced that he was of unsound mind; that, having always previously been fastidiously neat and cleanly in his person, and decent in his conduct, in 1846 and 1847 he conducted himself in an indecent and disgusting manner; that, when at Dover and Brighton, in those years, he declared that he would do for his wife; that, while at Brussels, in 1845, he became acquainted with Dr. Mahon, and agreed verbally to pay him 10,000*l.* in case the commission of lunacy should, through his instrumentality and exertions, be superseded, and he should be placed in the uncontrolled possession of his property by the 31st of December ensuing; that, although the commission had not been superseded, so as to entitle him to the 10,000*l.*, yet he claimed a proportion in respect of his services, and in December, 1848, all his claims were referred to the arbitration of Mr. Prinsep and Mr. W. J. Richardson, who awarded certain sums, amounting together to 2140*l.*, which were paid; that, being urged by Dr. Bright and Dr. Southey, on an examination before them in July, 1847, to express to Mrs. Dyce Sombre, by letter, the regret which he must feel at having, by his unfounded accusations, so deeply wounded her feelings, he said he would not do so without consulting his lawyers, adding, that if he were to act on the impulse of his own heart, he should never obtain his freedom from the Court of Chancery. After referring to some of the Chancery proceedings alluded to in the adverse allegation, the plea went on to allege that, early in 1849, the deceased caused 2000 copies of a book to be printed, which he had composed and arranged, called "Mr. Dyce Sombre's Refutation of the Charges of Lunacy brought against him," and caused them to be circulated, and that, contrary to the advice of Mr. Prinsep and others, he sent copies of a petition alluding to various passages in the book to peers and members of the House of Commons, stating his readiness to undergo an examination before the British House of Parliament, and praying that such examination should be concluded before the then session was over; that about Easter, 1849, he was introduced to, and saw for the first time, Mr. Forbes Campbell, who had formerly been in the East Indies, when he maintained and persisted, though assured to the contrary, that he had known that gentleman intimately in India; that in August, that year, he declared that a servant was in the room, although he was not; that through the year 1850, and until his death, he continued to labour under the insane delusions as to his wife and the East India Company; that, when in Paris, at various periods from 1845 to 1850, he was accustomed to bring or admit into his rooms, at all hours, common prostitutes; that, while in cabriolets, alone, in 1849 and 1850, at Paris, he talked, swore, and laughed loudly, and often took up prostitutes in

the streets to ride with him, who were so alarmed by his conduct and demeanour that they cried out to the driver to stop, and insisted on getting out of such carriage, exclaimed that the deceased was a madman; that in April, 1835, being of sound and disposing mind, he made a will whereby he left everything he possessed to the Begum; that in 1836, after her death, he made another will, the contents of which were not known; that in 1837 he again made a will and disposed of the bulk of his property in favour of Mrs. Troup and her children, and in default of issue in favour of Madame Solaroli and her children, giving about 50,000*l.* to a natural daughter, since deceased, but which will had not been found; that at the time of giving instructions for, and executing the papers now propounded, he was of unsound mind, which he habitually and constantly manifested; that Mr. Prinsep was, in 1845, a candidate for a directorship in the affairs of the East India Company, and was elected a director in 1850; that, while he was a candidate, he often stated and represented that the deceased would benefit India by his will; that in November, 1848, Mr. Prinsep applied to Mr. Lawford, the solicitor of the East India Company, to make a will for the deceased, which he declined to do; that the testator never, at any time before 1843, expressed any respect or gratitude to the East India Company or to the directors thereof, but complained bitterly of their conduct to him, and that he never before that year expressed any intention of leaving any money to the Company or to the directors thereof; that he had a very slight acquaintance with Sir R. Jenkins's daughters, or either of them; that the jewels, trinkets, and ornaments of the person belonging to the deceased, given by the will to his executors, after the determination of the interest therein of Mrs. Dyce Sombre, were of the value of 7000*l.* or thereabouts.

An allegation was also given in on behalf of Baroness Solaroli, which pleaded that she was the lawful sister of the deceased, and co-heiress at law with Mrs. Troup; that the deceased, while in a sane state of mind, knew that his parents were duly married; and that, save in the latter years of his life, when under insane delusion, he, Mrs. Troup, and Baroness Solaroli, constantly owned and acknowledged one another as and for lawful brother and sisters; that the Begum, having adopted the deceased and his sisters from their earliest infancy, treated Mrs. Troup and Baroness Solaroli with maternal affection and as adopted daughters; that they both continued to live in her palace and under her immediate protection until their respective marriages; that their father fell under the displeasure of the Begum, and was dismissed from her service, but for some years afterwards occasionally saw his daughters at the Begum's palace, at Delhi; that on their marriage the deceased assisted at the ceremony, and gave Baroness Solaroli away; that he had kind and affectionate intercourse with them until 1846, and prior to 1838 declared that he intended to leave his property to them, and did so by a will executed that year; that their father died a widower and intestate in 1838, and his property was divided equally between the brother and the two sisters, with the full assent of the deceased; that after he had been found to be a lunatic in 1843, Mr. Francis Barlow, commissioner in lunacy, reported to the Lord Chancellor that Mrs. Troup and Baroness Solaroli were the co-heiresses at law, and only next of kin of the deceased, and, with his wife, were the only persons entitled to his estate, under the statutes for the distribution of intestates' estates; that in 1843, when at Paris, he expressed great affection for Baroness Solaroli and her children, and was in the habit of buying toys and presents for the latter; that in 1846 he suddenly took up a fancy that Baroness Solaroli was not his sister; that, under the influence of such insane delusion, he attempted to explain the ground of such notion; that he asserted that Mr. Prinsep had assured him as of his (Mr. Prinsep's) own knowledge that she was illegitimate, but that Mr. Prinsep never had any knowledge of the fact whether she was legitimate or not, save from the asser-

tions of the deceased himself; that the deceased was under the insane delusion that Lord Metcalfe had made an affidavit on the subject, and had left it in the custody of Lord John Russell, and he accordingly several times applied to Lord John Russell for it; that, at a medical examination which took place in 1848, he was examined as to the grounds of his belief that Baroness Solaroli was illegitimate, and his statements evinced that he was then labouring under insane delusions as to his birth; that, while in India, as well before as after the marriage of Baroness Solaroli, he was on terms of great intimacy and friendship with Baron Solaroli, presented him with gifts, and constituted him one of his attorneys for India; that, while at Rome, he solicited the Pope to confer an order of honour on the Baron, to which His Holiness acceded; that in 1846, under the influence of an insane delusion, he maligned and abused the Baron, and printed libels concerning him; that in 1847 he informed the Baron by letter what he had done, and afterwards attacked or menaced him with a stick; that the printer of the libel was fined 200*l.*; that he again printed the libel, with certain additions and alterations, in his "Refutation;" that the statements contained in it were utterly false and untrue; that Mr. Prinsep and Mr. Desborough, jun., from time to time represented to the deceased that his notions regarding Baroness Solaroli and her husband were considered by physicians and by the Lord Chancellor as delusions, and results and symptoms of his insanity, and, after the date of the will and codicil, they besought him to suppress and conceal them, and warned him that it would be in vain to expect the commission of lunacy would be superseded if he continued to evince them; but he still maintained them, and was under their influence when the will and codicil were executed; that in 1849 and 1850 he continued to circulate the libels regarding the Baron, and in letters to Lord Chancellor Truro exhibited the same delusions; that he was not naturally of an irritable or jealous disposition, but became so after his marriage, and was jealous with regard to women with whom he had cohabited in India, and as to whom, when he cohabited with them, he had shown no jealousy; that after September, 1843, when he escaped to France, he often acted with the most outrageous and revolting indecency, and, among other instances of such conduct, would receive visitors and others in his apartment in a state of nudity, or having only a shirt on, and would exhibit himself out of his apartments in the same state, acting as if unconscious of any impropriety; that he habitually refused to pay for articles which he had purchased, for vehicles which he had hired, and for services ordered by him; in consequence of which, complaints were made to the police authorities, by whom he was treated as a person of disordered intellect.

A further allegation was then brought in on behalf of Mr. Prinsep in support of the papers propounded, in which it was averred that the parents of the testator followed in all respects the usual customs of natives of India, as well in regard to their own conduct as to that of their family and establishment; that it was usual for married ladies of rank, natives of India, to keep slave girls in their harems, and that the mother of the testator had several such slave girls; that, without any violation of the strictest notions of propriety, their husbands were accustomed to cohabit with them as concubines; that, according to the provisions of the Mahomedan law, the children of such concubines were entitled to participate in the distribution of their natural father's property, equally with the children of his lawful wife; that no distinction was made between them; that they were brought up together, and acknowledged each other as brothers and sisters; that Mrs. Troup and Madame Solaroli were taken under the protection of the Begum, and brought up in the usual manner in India; that in 1826, when the Assistant of the East India Company, resident at Delhi, visited them in order to ascertain their wishes in respect to their proposed removal to Sirdhana, he conversed with them from behind a curtain or screen; that the Begum selected and approved their husbands, and they were

wholly unacquainted with them previously to their being married to them; that soon after their marriages it was announced by the Begum, or became well known to their husbands, that the testator would inherit the bulk of the property and fortune of the Begum; that frequent discussions arose thereon, and the husbands urged the claims of their respective wives to a portion of the property, and the testator voluntarily promised to make a settlement on them and their children, which he afterwards did; that the testator and the Begum, in his presence, frequently declared that they did not consider that they had any relations who, as such, were entitled to succeed to, or had a right to complain of not sharing the Begum's property; that the testator also declared that if they were content with this promised settlement all well and good, but, if not, they must try their best another way; that after the death of the Begum he was in the habit of declaring that his sisters had no claim on the Begum's property, or upon him as his supposed next of kin, for that his property was given to him by the Begum, and not by his parents; that he resided with the Begum from early childhood, and lived with her down to the period of her death, save only during the time when, as a boy, he resided with the Rev. Mr. Fisher, to whose habits and manners he then temporarily conformed; that such residence produced no permanent change in his habits and feelings, which were essentially those of a native of India, in the condition of life to which he belonged; that, on his attaining a suitable age, the Begum assigned to him, or he took from her harem, with her consent, two or more concubines, and had several children, who all died in their infancy; that they were maintained at the expense of, and in the palace of, the Begum, and were regarded with especial favour by her; that she made them handsome presents, and manifested great grief at their respective deaths; that Mrs. Troup and Madame Solaroli associated freely with the testator's concubines, and took an affectionate interest in the children; that the destruction of human life by the mixture of fatal ingredients with food was a common occurrence among the natives of India; that the upper classes were habitually apprehensive of such a death, and in case of temporary illness habitually attributed it to poison given to kill or injure them; that the testator was at an early age led to believe that his life was in danger, more especially by the Begum, who frequently warned him to take precautions against divers persons, and advised him not to eat anything that might be given him by any person, even by the husbands of his sisters; that the natives of India were habitually superstitious, and had faith in the intervention of spirits and supernatural agency in human affairs; that the testator and the Begum, notwithstanding their profession of Christianity, were, and continued at all times to be, impressed with such belief; that the testator's father, on being dismissed from the service of the Begum in 1826, brought forward certain pecuniary claims, amounting to a considerable sum, against her, but which were not admitted during her life and remained unsettled at her death, when they were preferred against the testator as the successor to her property and fortune; that previously to his leaving Calcutta, on his voyage to England, his father commenced proceedings against him, but which were abandoned upon an engagement made with his sanction to pay a certain sum of money; that that sum formed a considerable part of the personal estate to the father; that the testator received no distributive share of his father's personal estate, but as the third part was collected and got in, it was set off against the sum of money due and owing from the testator; that shortly after his marriage the testator admitted that he was jealous of his wife, especially in August, 1842, in the presence of General Ventura, to whom he declared that he bitterly regretted the usages of English society, which compelled him to allow his wife to go into company, where she was exposed to the attentions of other men; that at the same time he became suspicious and distrustful of those men whom his wife met in society, and even of General Ventura, by reason of

his having, when in conversation with the testator, expressed himself in strong terms of admiration of her; that such distrust and suspicion were admitted by his wife, after consulting her friends, to arise from his ignorance of the manners and habits of society in Europe; that previously to his marriage he challenged his wife's father in consequence, as he averred at the time, of her having broken off her engagement to marry him; that in 1843, shortly after Baron Solaroli and his wife arrived in England from India, but before the execution of the commission of lunacy, the baron sent a letter to the testator, wherein he offered his services to him on the occasion of such commission being issued, but which offer was rejected by the testator; that on the testator escaping to Paris, Baron Solaroli went to him from Boulogne, where he was resident, and was present at the examination before the prefect of police, previously to which he sent a letter to the French Minister of the Interior, wherein he solicited the protection of the French laws on behalf of the testator against the attempts of his wife and her agents to regain possession of his person, and stated, among other things, that the testator's conduct protested loudly against the pretended madness which had been imputed to him, and which could have no object but to deprive him of his fortune; that when application was made to the Court of Chancery for the appointment of a committee of the person and estate of the testator, in 1843, Mr. Troup, being fully informed by Baron Solaroli of the then state of the testator's mind, wrote several letters to the testator, offered his services in communicating his views to his lawyers, suggested that the testator had not been fairly dealt with, and referring to the verdict of the jury, expressed his sincere regret that he should be so fettered; that when *ad interim* committees of the person and estate of the testator were appointed, Mrs. Dyce Sombre sent a letter to Mr. Okey, then at Paris, and therewith transmitted copies of several affidavits in respect of his property, and stated that they were sent for the perusal of the testator; that if any part of a schedule she forwarded was wrong as to the Indian property, she requested Mr. Okey to get the testator to explain it, and let her know, that she might have it rectified; that Baron Solaroli, notwithstanding he had exerted himself in 1843 on behalf of the testator, nevertheless co-operated with Mrs. Dyce Sombre and Mr. Troup in opposing him in all the proceedings subsequently taken to supersede the commission of lunacy, in consequence of which the testator conceived a great dislike and antipathy to him, which he constantly expressed; that entries of the baptism of the testator and Mrs. Troup were duly made in the register book kept for the church of the Roman Catholic Mission of Sirdhana, but no entry could be found of the baptism of Madame Solaroli, and the deceased frequently alluded to that as a ground for believing that she was illegitimate; that before he entered into the engagement with Dr. Mahon, he voluntarily submitted himself to the examination of several medical men, and evinced himself to be of perfect sound mind, memory, and understanding; that while at Brussels, in 1845, he mixed in society, and was considered by friends, acquaintances, and medical men to be of sound mind, and competent to manage himself and his affairs; that Mr. Prinsep, who was at the time Secretary of the Government of India, and in attendance on the Governor-General of India, first became acquainted with the testator in 1831, when the Begum and her troops, then in command of the deceased, joined the camp of the Governor-General; that upon his arrival at Calcutta, in 1837, where Mr. Prinsep, who then held the office of Secretary to the Government of India in the General and Financial Department, was at that time residing, the testator renewed his acquaintance with him, and consulted him as to the investment of his property; that at a late hour one night, when he could not procure the necessary bail for his release, he was arrested at the suit of his father, and the fact becoming known to Mr. Prinsep, he took measures to enable him to procure his release, for which the deceased expressed

his gratitude; that, with few exceptions, he had no further intercourse with him until 1844, when he accidentally met him in London; that knowing the testator to be a proprietor of East Indian Stock, he solicited him for his vote and interest for the office of Director; that he informed Mr. Prinsep of the Chancery proceedings, and occasionally corresponded with him in respect of his affairs, but did not interfere therein, except to apply to the Lord Chancellor to allow him a better income, which was granted; that in the latter end of 1845, or the beginning of 1846, Mr. Mahon, who was then unacquainted with Mr. Prinsep, called upon him in London, and stated the terms of his engagement with the testator, and of which he had been apprised by a letter from the testator himself; that Mr. Mahon informed Mr. Prinsep of the intention of the testator to renew his application to supersede the commission of lunacy, and showed him the opinions of medical men, and other statements and evidence on which his expectation of success was founded; that Mr. Prinsep being thereby led to think more favourably of the case of the testator than he had previously done, he visited him in 1844, both at Dover and Paris, and saw him on several occasions, on each of which his conduct and conversation were rational and sensible; that about January in that year, he expressed a desire to make his will, and made particular inquiries of Mr. Prinsep as to who would succeed to his property in case he left no will; that Mr. Prinsep, in reply thereto, informed him that his wife and sisters would divide it equally between them, but, as regarded his wife, provided her claims were not barred by her marriage settlement, and as regarded his sisters, provided they were born of the same mother, and that his father's marriage with his mother could be proved; that he requested Mr. Prinsep to make inquiries of Lord Metcalfe, who, as he stated, knew everything respecting their birth and parentage; that Mr. Prinsep had two interviews with his Lordship, who said he believed that the testator and Mrs. Troup were children who were introduced to him at the Begum's house, at Delhi, but he could give no information about any younger child; that Mr. Prinsep informed the testator of the purport and effect of the statement of Lord Metcalfe, who in reply expressed his surprise at the reserve of his Lordship, for that he must have known the circumstances relating to the birth of Madame Solaroli, and that she was the daughter of his father by a slave girl; that in consequence of the death of Lord Metcalfe, Mr. Prinsep was unable to consult him again; that after the first mention to Mr. Prinsep of his wish and intention to make a will, he repeated it on several subsequent occasions, both verbally and by letter, and requested Mr. Prinsep to ask the solicitor to the East India Company to go to him at Paris for that purpose; that Mr. Prinsep accordingly applied to Mr. Lawford, who declined to make such will, or to advise the testator in reference thereto, by reason of the testator having some unsettled claims upon the East India Company which it might be his duty, upon the part of the Company, to resist; that the testator, when in London, in November, 1848, again adverting to the subject, asked Mr. Prinsep to procure from his own solicitors a form of a will which he might fill up, but, on applying to Messrs. Desborough and Co., he was informed that no such form could be recommended, and upon further communication with him, he requested Mr. Prinsep to desire one of the firm to call upon and converse with him on the subject; that the testator never spoke to or consulted Mr. Prinsep as to the contents of his intended will, and he was ignorant of the purport of it until after his death, save that he informed him after its execution that he was appointed one of the executors; that in or previous to 1848, Mr. Mahon, in consideration of services which he had rendered to the testator, in procuring him the enjoyment of his entire surplus income, claimed to be reimbursed his expenses, and to be compensated for his losses and trouble; that the testator proposed to refer the claim to arbitration, and with a full knowledge of the opinion of Mr. Prinsep in respect of the justice of the claim, and a concur-

rence in that opinion, urged Mr. Prinsep to accept the office of arbitrator, which he ultimately consented to do, and Mr. Richardson was appointed by Mr. Mahon to act on his behalf; that throughout the proceedings and inquiry before the arbitrators, the deceased evinced himself to be of sound mind; that in the spring of 1851, Dr. Winslow, who was then staying at an hotel at Paris, was visited by the testator, and requested to examine him in case there should be any dispute about his will; that Dr. Winslow had long and repeated interviews with him on several successive days, during about three weeks; that the testator discussed with him the various proceedings to supersede the commission of lunacy and the result, and produced to him various affidavits and other documents connected therewith, and freely and unreservedly conversed with him thereon, and especially in respect to his wife, and Madame Solaroli and her husband, and as to his alleged delusions in regard to them; that the testator throughout such interviews evinced himself to be of perfect sound mind; that the testator, when at Paris and elsewhere on the continent of Europe, was watched by persons employed for that purpose, by or on behalf of his wife, which were used in opposing the petitions presented by him to the Court of Chancery, and that the testator was well aware of it; that Mr. Charles Shadwell, his solicitor, in reference to several affidavits filed in opposition to the last petition, which came on for hearing in May, 1851, informed him that they had been treated by the Court with the contempt they deserved, and that the petition had been opposed in every possible way; that on his arrival in London in 1851, he complained of such, the conduct and proceedings of his opponents, and especially of his wife; and at an interview which he had with Mr. Prinsep, produced and commented in severe terms upon the contents of a note which he had just received from her, in which she solicited an interview with him; that he had associated with common prostitutes in India, and that occasionally, while resident in the Upper Provinces, he had appeared in his dwelling-house and in places of public resort in a state of nudity, or without any article of clothing except a "lungotee" fastened round his loins and hips; that from an early period of life he was in the habit of making use of oaths and profane and angry expressions without cause or provocation; that though lavish in his expenditure, or in his presents to the women with whom he cohabited, and also upon his amusements, yet he was at all times careful in the investigation of pecuniary demands upon him; and that in regard to his habits and conduct there was no change at any time prior to his decease.

To Correspondents.

The conclusion of the article on *Oinomania* is unavoidably postponed until our next number.

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OCTOBER 1, 1855.

STATE OF LUNATIC ASYLUMS AND THE INSANE IN IRELAND.*

WE have before us the seventh report of the Inspectors of Lunatic Asylums in Ireland, embodying an elaborate account of the state of the various institutions established in that country, private and public, for the care and treatment of the insane. This public document appears to have been drawn up with great care, and redounds highly to the credit of the Inspectors appointed by Government to protect the interests of the insane, and to regulate and control the various institutions devoted to their care and treatment. According to the official returns, which are made up to the 31st of March, 1855, the number of insane persons brought within the cognizance of the Inspectors, was 13,493. They are thus distributed.

	Males.	Females.	Total.
1. In District Lunatic Asylums . .	1720	1802	3522
2. In Central do. . .	84	42	126
3. In Private do. . .	252	207	459
4. In Gaols, under 1 Vic., c. 27, and 8 & 9 Vic., c. 107	101	55	156
5. In Poorhouses	734	1266	2000
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Total number of Lunatics under Official Supervision on 31st March, 1855	2891	3372	6263
6. At large, unprovided with asylum accommodation, on 31st March, 1855	4035	3195	7230
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Total number of insane of every denomination in Ireland . .	6926	6567	13,493

* "Seventh Report on the District Criminal, and Private Lunatic Asylums in Ireland." Dublin. 1855.

There appears to have been, since the Report of 1851, a decrease in the number of the insane, to the extent of 1605. This is attributable to the decrease of insane in poorhouses and in gaols. In 1851 there were confined in poorhouses 2393 lunatics; in 1855 the number was reduced to 2000. In 1851 there were upwards of 500 lunatics in the Irish gaols, whilst in 1855 there were only 156 in custody. This number will be still further reduced, in proportion to the extension of additional accommodation for the insane in public institutions, especially erected for their treatment. The Inspectors have always entertained strong objections to the residence of insane persons in such places, where they must of necessity, considerably interfere with the discipline and order which it is desirable to maintain amongst prisoners. Of the lunatics in poorhouses, nearly two-thirds are of the female sex. The Inspectors entertain grave objections to the residence of the insane in poorhouses, justly observing, that

“It is obvious, for many reasons, that the most suitable place for every demented person, lunatic or idiot, harmless or otherwise, is an institution specially devoted to the care of the insane, under the superintendence and management of experienced officers and attendants, who are practically acquainted with the treatment of mental disease in every form, and directed and controlled by that department of the public service to which the supervision of all matters relating to such establishments properly belongs; and we regard the question as deserving the consideration of the executive, namely, whether the time may not have arrived for making provision for the complete separation of the insane poor of every class, from the sane portion of the community; and which, whilst effecting a moral duty towards the latter, would insure for the insane poor, idiotic or imbecile, more care and comfort than they can possibly have in ordinary workhouses, where they cannot at all times be secured against annoyance from the ignorant or thoughtless paupers by whom they are surrounded. We feel that objections to a change may be advanced on financial grounds, and that it may be argued, considering the extremely low position which, particularly the idiotic, inmates of poorhouses occupy in the human family, both socially and mentally, that they are comfortably circumstanced and sufficiently well cared for at present.

“It is evident, however, that the attention and care necessary for the relief of these distressed classes cannot be efficaciously extended to them whilst they are placed in institutions of a very different nature from asylums; and further, it would be falling into a great mistake to imagine that even the most miserable objects of mental incapability are beyond the reach of being relieved; for there is no species of disease or affection, from the highest state of maniacal excitement to the very lowest grade of imbecility, that does not admit of cure or alleviation under judicious treatment, such alone as can be obtained in establishments exclusively devoted to the object.”

To meet such a contingency the Inspectors propose enlarging some of the existing district asylums, by the erection, at a small expenditure, of suitable auxiliary buildings, with large dormitories on the ground-floor. We consider this suggestion practicable, and entitled to serious consideration. The expenditure of Asylums has, as might be naturally supposed, from the high price of provisions, greatly exceeded that of former years. The subjoined extract from the report places this matter in a clear light:—

“The average cost of maintenance, including every expense, was therefore, as above, 17*l.* 9*s.* 4*d.* for the year ending 31st March, 1854, and 19*l.* 15*s.* 10*d.* for the year ending 31st March, 1855, showing a difference of 2*l.* 6*s.* 6*d.* per head in favour of the former year.

“As a general rule, the Asylums containing most inmates exhibit the lowest averages, as Ballinasloe, Belfast, Cork, and Limerick, which show for the first year, conjointly, an average of 15*l.* 16*s.* 11*d.*, and for the second, 18*l.* 10*s.* 5½*d.* Richmond Asylum, however, the largest institution of the kind in Ireland, is an exception to the rule, the averages for the two years, respectively, being 17*l.* 4*s.* 11*d.* and 21*l.* 17*s.* 4*d.*; but the highest prices at which the necessary commodities of life generally range in the metropolis, will sufficiently account for this difference.

“The length of time the Asylums have been established appears also to exercise a beneficial influence upon the expenditure, the Armagh and Waterford (the two smallest District Asylums in Ireland, and which have been in operation—the former for thirty, and the latter for twenty years) showing, comparatively, very low averages, while those lately occupied, as Kilkenny, Killarney, and Omagh, give the highest averages of all, owing, in a great measure, to incidental expenses attendant on their opening.

“The Asylum at Cork is the only one in which no material change has occurred, the increase during the year ending 31st March, 1855, being but 3*s.* 4*d.* per head per annum on the outlay of the preceding year, while the increase in the other establishments varies from 1*l.* to 4*l.*, Londonderry alone excepted, where a diminution has taken place in 1855. This diminution is, however, accounted for by the fact that the Omagh patients were taken away in 1854, thus leaving the expenditure for that year to be distributed over a reduced number of inmates.

“Looking to Ballinasloe, Belfast, Cork, Limerick, Londonderry, and Richmond Asylums, which taken together afford an average of 325 inmates each, for the year ending 31st March, 1855, the annual outlay in salaries and wages is but 3*l.* 11*s.* per head, while in the remaining eight Asylums, which only give an average of 150 patients, we have it raised to 5*l.* 13*s.* 6*d.* The advantage which the larger institutions thus obtain in an economical point of view, is, as regards the staff, very important.

“The several averages on Diet alone range in 1854 from about 5*l.* to 7*l.*, and in 1855 from about 7*l.* to 9*l.*; but in the clothing there is

very little difference between the two years, in 1854 it was 1*l.* 4*s.* 8*d.* and in 1855, it was 1*l.* 2*s.* 9*d.* per head."

In reference to the number of admissions, it appears that the inmates of the several district asylums on the 31st March, 1855, amounted to 3,299; the number being at the corresponding period of our last Report, 2870; or, 1447 males, and 1423 females; thus showing an increase of 429 within two years, namely, 205 males, and 224 females; and it is satisfactory to find that as facilities for early admission have been extended by means of the new district asylums which have lately come into operation, proportionate advantages have been obtained both in a curative and sanitary point of view, as will appear from the following summary, in which the admissions, discharges, and deaths, that have occurred during the years 1853-4, and 1854-5, are contrasted with those of the two previous years. With regard to the admissions, it should be borne in mind that two new asylums, viz., Kilkenny and Killarney, were opened in the year 1852-3, which circumstance, by adding to the admissions for the last two years ending 31st March, 1853, to an unusual extent, renders the contrast in favour of the period of which we are treating less remarkable than it otherwise would be.

	Two Years ending 31st of March, 1853.			Two Years ending 31st of March, 1855.		
	Males.	Fe- males.	Total.	Males.	Fe- males.	Total.
Admitted	1064	1039	2103	1197	1114	2311
Discharged during the two years—Cured. .	409	406	815	458	421	879
" Relieved. .	99	116	215	147	106	253
" Not cured	100	85	185	79	78	157
" Incurable	34	78	32	40	28	68
Total Discharged	642	645	1287	724	633	1357
Died during the two years	277	253	530	268	257	525
Number of Inmates on 31st March, exclu- sive of Island-bridge	1447	1423	2870	1652	1647	3299

The admissions, according to the foregoing, during the two years ended 31st March, 1855, exceeded the admissions of the two former years by 208, namely, 133 males, and 75 females. The excess of recoveries was 64; or, 49 males and 15 females. The number discharged cured being 879, and relieved, 253, which, taken together, give a per centage of 49 on the admissions; while the mortality, notwithstanding the increase of inmates, is less by 5 than in the two

former years; being a little more than 10 per cent. on the total number under treatment.

Great attention appears to have been paid to providing suitable occupations for the insane, and that with the best results. There were employed on a given day, which we have taken as affording a comprehensive view of the state of the asylums in this respect, 1891 persons, of whom 962 were males and 929 females. Of the males, 441 were engaged in gardening and agricultural labour; 83 in various trades, as weaving, shoemaking, tailoring, &c.; and 438 in a variety of miscellaneous employments. Of the females, 537 were occupied in needlework, spinning, knitting, quilting, and fancy work; 134 in the laundries; 172 in house cleaning; and 89 in miscellaneous employments.

The proportion of employed to the whole number under treatment is 57 per cent.; a very favourable proportion, when it is remembered that of the 3282 patients, 2072 were probably incurable, and 366 epileptics and idiots.

The Inspectors speak highly of the benefits which have resulted to the insane from bringing them within the sphere of religious instruction. A large majority of the patients continue to attend the chapels of the asylums on each Sunday, and by their calm and collected demeanour during Divine service, evince a sense of the purpose for which they are assembled; and it is not alone on the Sundays but during the week many of them look forward to the visits of the chaplains with the greatest anxiety.

On this point the Inspectors observe, that,

“In the treatment of mental disease, our continued experience bears us out in the opinion ‘that a very large proportion of the inmates of an hospital for the insane, are capable of deriving advantages from that form of religious observance in which they have been brought up; and that hence it becomes an obvious duty to provide the necessary means of public worship in every lunatic asylum.’ No doubt, in his general ministrations, and still more in his private communications, the chaplain of an asylum should not lose sight of the characters of his hearers, nor of the great judgment and delicacy called for in their regard. But it is not the patients alone who feel the important advantages of the services of ministers of religion in these establishments; for it should be recollected that the instruction imparted by them, and the performance of divine service, cannot fail to produce a marked moral benefit on the attendants also, who may be considered, from the nature of their duties, as in general debarred from a due and regular attendance at their respective places of worship on Sundays and other days of devotion.”

We are gratified to observe that the Central Asylum erected at

Dundrum for the safe custody of insane persons charged with offences in Ireland, has from its opening proved eminently successful. The number of patients confined in the Asylum amounts to 126. The admissions are restricted to cases of a grave character, or to those where, though the offences might not be very serious in themselves, the offenders had evinced particularly dangerous symptoms or inveterate propensities of a criminal nature.

In reference to the general state of the criminal inmates of the Central Lunatic Asylum, it appears that 28, or nearly one-fourth of the whole number of patients, are pronounced recovered or convalescent, 15 of whom have become so within the last two years.

“Had these twenty-eight been ordinary inmates of an asylum, they would have been set free, each after a probation of about six weeks; but in the Dundrum Asylum their sojourn is much more lengthened and indefinite, as even under the most favourable circumstances we would not submit the proposition of a discharge without an unbroken restoration of mind, coupled with exemplary good conduct, for a twelvemonth, as the very shortest period.”

We have in previous numbers of this Journal contrasted the state of the law with regard to the confinement and liberation of criminal lunatics in this country to that liberal, enlightened, and philosophic mode of procedure adopted so successfully in the sister country. In England, in criminal cases, an acquittal on the ground of insanity is tantamount to perpetual imprisonment, and imprisonment too under the most degrading, humiliating, and painful circumstances. Whilst under the affliction of dire disease, destroying all power of rational thought and healthy self-control, and that, too, when the mind is often tortured by wild and terrible phantasies, an overt act of crime is committed. Insanity is urged as an extenuating plea,—the jury fully recognising the irresponsibility of the prisoner, acquit him of the charge, and a verdict of “not guilty, on the ground of insanity,” is properly recorded. The unhappy lunatic, who is no more accountable for his criminal act than a man would be for the wanderings of his intellect whilst under the influence of a disturbed dream, instead of being transferred, after acquittal, to the kind care of his relations and friends, is, like a common felon, handed over to a public officer, and forthwith sent to the criminal department of one of our public Asylums, there to spend the remainder of his wretched days as the miserable companion of idiots, and as the associate of the worst class of insane criminals. His attack of insanity, provocative of the offence for which he was tried, may have been temporary and transient in its character, similar, for illustration, to that of puerperal mental derangement. The law, however, in its profound wisdom, recognises amongst

criminal lunatics, no distinction of classes. A man once criminally insane, continues so for the term of his natural life. A recovery is viewed as an impossibility, and liberation from restraint highly dangerous to the safety and welfare of society. The law, owing to its harshness in this particular, often stultifies itself. Consider, for instance, a case of recent occurrence, which has, unhappily for all parties concerned, obtained a painful notoriety. An amiable and intellectual lady, much beloved and highly respected in private life, the wife of a distinguished physician, in a paroxysm of obvious and unmistakeable monomaniacal delirium, abstracts from a shop an article of insignificant value. The facts connected with the offence, as well as the previous history of the mental condition of the party; clearly and conclusively demonstrated, beyond the possibility of doubt, the existence of a morbid state of the mind at the time of the commission of the alleged criminal act. This was apparent to all the medical men who were consulted, as well as to the eminent counsel employed to conduct her defence. No rational or right-thinking person at all cognisant of the facts that could have been deposed to at the trial, entertained the shadow of a doubt as to the absence of all criminality, or as to the certainty of her acquittal at the hands of a British jury. Why, then, it will be asked, was not medical evidence forthcoming at this lady's trial, and the plea of insanity urged in extenuation of her offence? We will briefly answer the interrogatory. It was apparent to the able legal advisers engaged in the case, that if this unhappy lady, who, in a moment of delirious excitement, and consequent *loss of self control*, had brought herself within the jurisdiction of the law, were to escape on the plea of legal irresponsibility caused by mental derangement, she would inevitably pass from the Central Criminal Court to the dreary and desolate wards of Bethlehem Hospital, and that no efforts that might be subsequently made to effect her liberation would lead to any satisfactory result. The husband of the lady, as well as his legal advisers, had a clear perception of this painful alternative, and it was thought better to lay before the jury a clear and succinct statement of the facts of the case, leaving it to their sense of justice and humanity to decide the issue. Had the state of the law not have been so manifestly defective, another course would have been pursued, but it was thought safer to run the risk of a conviction, with its accompanying obloquy and punishment, than urge as an excuse the plea of insanity, and thus incur the danger of perpetual imprisonment among the insane.* The law pretends to acquit, on the

* We copy the subjoined particulars from the police reports of the *Times* of September 5th. We are reluctant to make any observations offensive to the magistrate whose duty it was to adjudicate in the painful case referred to in the

ground of irresponsibility, induced by diseased brain and disordered mind, and *yet PUNISHES those so acquitted with the severest penalty short of actual death upon the scaffold!* This anomalous state of the law is a disgrace to a Christian and civilized community. We freely admit that great caution should be exercised in the liberation of per-
above remarks. He was at the time exposed to severe animadversion for his alleged harsh and somewhat Spartan mode of dealing with the case. Influenced, we have no doubt, by a nervous anxiety to administer equal justice to rich and poor, he somewhat strained his judicial functions, and instead of adopting the *humane* view of the lamentable position in which the lady had placed herself, and at once viewing the matter before him in its proper light, he, by taking the extreme course, and sending the case to trial, inflicted an amount of mental anguish upon the numerous members of a much respected family beyond the reach of all remedy. Let our readers contrast this proceeding with the benevolent and enlightened course pursued by Mr. Jardine in the case that came judicially before him.

"BOW-STREET.—Jane Moseley, a young lady residing at 10, Mornington-place, Hampstead-road, was charged before Mr. Jardine with stealing a papier maché portfolio, worth 5s., the property of Lavinia Price, of 18, Hart-street, Bloomsbury-square.

"Ellen Woodward stated that she was a housemaid in the service of the prosecutrix. On Monday evening the prisoner called at the residence of her mistress, and requested to see the first-floor apartments, which were to be let furnished. Witness showed her up into the drawing-room, upon which the prisoner requested her to fetch a glass of water. Witness ran down stairs for this purpose, and while she was returning with it saw the prisoner in the act of leaving the house. The circumstance having excited her suspicion, she hastened back to the drawing-room to see if anything had been removed, and, missing the portfolio from the table, followed the prisoner into the street, and accused her of stealing it. The prisoner denied the charge, but witness insisted on bringing her back to the house. The prisoner then produced the portfolio from under her shawl, and offered witness 5s. not to say anything about it. A policeman was called, however, and she was given into custody.

"The prisoner sobbed bitterly during the examination of the witness, and declined to say anything to the charge.

"The mother of the prisoner, who appeared equally distressed, stated that she was a widow. She had two daughters, both of them suffering from affliction, the prisoner's sister being at the present moment in the last stage of consumption. The prisoner was eighteen years of age, and, from causes peculiar to her time of life, was subject to fits of mental aberration. At such times she could not be regarded as a responsible being.

"Mr. Jardine inquired if any medical evidence to this effect could be produced.

"The mother having replied in the affirmative, the case was put back till a later period of the day, to enable her to do so.

"A gentleman, whose name did not reach us, but who stated that he was a professional gentleman residing in Caroline-street, Bedford-square, waited subsequently upon the magistrate, and informed his worship that he had known the prisoner's family for many years. They were of the highest respectability. The prisoner, he was aware, was an occasional sufferer from illness of a peculiar kind, and at such times he had known her mind to be slightly affected.

"Mr. Jardine.—Do you speak as a friend, or have you attended her professionally?

"Witness.—I have attended her professionally.

"Mr. Jardine.—You are prepared to assure me, then, from your own personal knowledge, that her mind has been so affected at times as to make her unconscious of what she is doing?

"Witness.—Yes, at short intervals.

"Mr. Jardine.—I think this is a case, then, in which I ought to restore the prisoner to her friends. She may be given up to her mother.

"The prisoner was accordingly discharged."

sons tried for capital offences, but is there not, we ask, a large number of persons at this moment confined in the criminal wards of our public Lunatic Asylums for the commission of trivial offences against the law, who might be either safely liberated from all restraint or be subjected to a modified and less offensive kind of surveillance?

But to return to the Report. When speaking of the liberation of homicidal cases, the Inspectors observe, that,

“One patient alone, a respectable married female, who destroyed her infant whilst labouring under puerperal mania, has been liberated since the date of our last Report. We shall have occasion, however, in the course of the present year, to lay before his Excellency the Lord Lieutenant, for his consideration, seven or eight cases as fit subjects for freedom. Of these cases, three were acquitted of homicide; but being now for over four years under our immediate supervision, and certified by the attendant physicians to be free of every symptom of mental derangement, at the same time that they have been uniformly quiet, industrious, and well conducted, we feel justified in the course we propose—the more so as they undertake to emigrate; two having already received money for the passage out to join their families.

“Independent of the exercise of clemency itself, in a moral point of view, the very fact of opening the gates of an asylum such as the Dundrum, and affording egress to objects deemed worthy of it, produces a beneficial and tranquillizing influence over those who remain behind, and who, if finding no prospective hope of freedom on recovery, but obliged to regard their future doom as the companions of madmen, might, from their very numbers, become most dangerous and difficult to control. There are two individuals, both respectably connected, acquitted of very aggravated assaults, and who being now, and indeed since their transference to the asylum, quite well, might be liberated; but as the parties on whom the assaults were committed (one the father, the other a solicitor) object to their enlargement, in deference to strong personal apprehensions, and aware of the responsibility we might incur if any thing untoward subsequently took place, we are unwilling to interfere. In the course of time, however, should those justifiable fears subside, or if some arrangement can be effected by us between the various parties, we trust they may then participate in the same consideration extended by Government to others.

In alluding to the importance of inquiring into the antecedents of criminal lunatics, and suggesting modifications of the law with regard to them, the Inspectors observe:—

“It would be very desirable in all important cases, as when a party is acquitted, on the plea of lunacy, of murder, or of a serious attempt on the life of another, that the antecedents to the act should at the time be judicially investigated. Once insanity is established—and it generally happens to be the first point urged in defence—the case closes; and those exciting causes, or incidental circumstances, likely to

modify the judgment of the court in regard to a prisoner thoroughly responsible for his conduct, are left unquestioned. Thus the lunatic labours under a disadvantage in one respect; for though acquitted of a moral crime, he may still become the penal sufferer by a more lengthened confinement. Amongst other instances under our cognizance, as illustrative of this view, we shall refer to three: the first, that of a man in the Central Asylum, who it was proved, whilst labouring under maniacal excitement from jealousy towards his wife in consequence of her supposed freedom of conduct, committed homicide. On recovery from his insanity he was brought to trial, when the fact was proved. This person is now quite sane, and has been so for some years. The second instance we may adduce in the person of a man, who, in a scuffle, inflicted a wound which ultimately caused death; he was acquitted on the plea of being deranged at the time of the occurrence. The third is one of a peculiar character, for the individual in question, acquitted also on the plea of insanity, complains that he has thereby been most unfairly and harshly treated; that he never was deranged; that the offence he committed was the result of the hardship and injustice he suffered at the hands of another, and of his consequent anger and excitement; and that had he been tried regularly, and found guilty, he would have escaped with a comparatively short imprisonment.

“The records alone of the fact of trial, and the cause of acquittal, exist in these and similar cases; but it would be most satisfactory if such records were coupled with the official information of attendant circumstances, in order that, when submitting them to the consideration of the Lord Lieutenant, we might be enabled to furnish ample materials for his Excellency’s decision; and to satisfy ourselves we were justified in stating them. So long as an asylum—no matter under what denomination, be it even that of criminal—is made the receptacle of our unfortunate fellow creatures, who, in the hour of grievous mental derangement, have committed offences in themselves the most appalling, or of those who, subsequent to sentence, may lose their reason altogether, so long its inmates have a claim on our kindest sympathies; it ceases, however, to fulfil its object if, through a mistaken benevolence, or from want of a scrutiny into the particulars of each case, it should become the residence of parties for whom it was not legitimately intended, or should an immunity for the undeserving be secured within its precincts.”

Reverting to the statistics in the Report, it appears, that of the twenty-eight criminal lunatics returned as cured, twelve were homicidal cases, nine being males and three females. Up to the time of making the report the total number of homicidal cases admitted into the Dundrum Asylum, were thirty-five males and nineteen females. The most frequent kind of homicide among the men is wife murder. No less than eight committed this offence, independent of those who attempted it, but fortunately without effect. This fact, at first sight, might seem to argue less constancy, fidelity, and tenderness with the male sex; but there are strong causes to explain away, or at least

reduce the force of the conclusion ; for it is well known that, occasionally, among the first and most marked symptoms of the disease with lunatics, may be reckoned a mistrust and aversion to members of their own family, and to those particularly with whom they had been united by the strongest ties of affection, and who, if physically weaker, in case any control is attempted, are most exposed to suffer from their violence. On the other hand, there is no record of a female killing her husband, the most common mode of destruction among women being infanticide, of which there was lately a very melancholy instance in the Dundrum Asylum. Great commiseration is, no doubt, due to many who come within this category ; for we can fully imagine how shame and anguish must weigh on an unfortunate and betrayed female, with enfeebled system, what strong temptations induce her to evade the censure of the world in the destruction of the evidence of her guilt, by a crime that outrages her most powerful instinct, maternal love of offspring. The thought of such a fearful exposure no doubt may lead to some sudden and impulsive act, for which, as generally happens, she is judged with the utmost leniency ; but still, unless the deed is accompanied with, and followed by distinct symptoms of insanity, the difficult question presents itself: Is such a person—sane immediately after the act, sane at trial, and sane on admission—to remain for life—or if not for life, for what period—the inmate of an asylum, and the associate of lunatics ?

The subjoined remarks, with reference to the particular tendencies of the insane, homicidal and suicidal, their fixity of delusion, responsibility, and peculiarities, will be read with great interest.

“ With regard to the existence of particular fixed tendencies among the insane, we are sure it will be both agreeable and interesting to your Excellency to be informed, that although the Dundrum Asylum is specially erected for criminal lunatics, and contains so many who have deprived their fellow creatures of existence, our experience of its inmates would almost ignore propensities of a decidedly homicidal character, although there are some patients in it with marked suicidal inclinations. We are aware of three only who have evinced this destructive propensity—a convict from Spike Island, sentenced to transportation for burglary, and two men who committed murder ; one of them, however, cannot be considered as innately malevolent, for he labours under a double delusion, inasmuch as he thinks if he can succeed in killing some person, he will thereby obtain his freedom here, and secure heaven hereafter. We would, therefore, in a spirit of humanity, be disposed to infer that some of the most serious offenders in the Asylum have become so more from accidental causes than from an original malignity of disposition.

“ Revolving on the whole class of homicides and those who have com-

mitted dangerous assaults on the person, it is difficult to assign how far responsibility may or may not be occasionally attached to certain individual acts. When persons are thoroughly insane, it is clear they are accountable for no crime, however frightful in itself; practically, however, from experience we would conclude that lunacy has not always been so developed as to destroy every idea of right and wrong, and a consequent feeling of responsibility; whilst it may have happened in a case or two within our cognizance that insanity was assumed to escape the ends of justice.

“The difficulties thrown in the way of liberating lunatics from the Central Asylum after recovery, and the length of their subsequent detention—for it is only by warrant of the Lord Lieutenant, based upon the certificate of the physicians and the final report of the Inspectors, that they are set free—has afforded some precise information on a point which is not so satisfactorily arrived at in ordinary institutions, from which patients are promptly discharged—viz., the permanency of cure. We have several cases where the parties seemed to have recovered their reason perfectly, and relapsed. One man (a homicide) who was steady and rational for nearly three years, became, without apparent cause, suddenly and boisterously insane; and now again, at an interval of four months, is tranquil and quite collected. Another, who came in highly excited, continued so, with little variation, for two years, when he rapidly got well to all appearance, remained so about eighteen months, and is now again as bad as ever. Some continue well for months, and then relapse; and while under all the favourable circumstances which comfort, regularity, and a healthy residence can produce. A peculiarity has hitherto marked these recurrent attacks—with one exception, they have been confined to the male sex.

“Occasionally, too, it has come within our observation that a perfect restoration of the mental powers takes place, so far as can be judged by an undeviating reasonableness of conduct and conversation, although the original delusion, which led to acts the most insane, continues in full force. We gave, in a former Report, the details of a case where the captain of a ship killed seven of his crew at a short distance off Cork harbour. For twelve consecutive years, this man had periodical attacks of violent madness; within the last four, however, he has shown no symptom whatever of disease; his time is principally devoted to pious reading; though never spoken to on the subject of his offence (according to an established rule in the Asylum), still, of his own accord, he has lately expressed his conviction that the crew actually mutinied with intent to murder him. The delusion is thus as fixed as ever, and, did a second opportunity present itself, the consequences, as far as depended on him, might, under similar circumstances, be alike unfortunate.

“As may be supposed, in an institution such as the Dundrum Asylum, many of the patients are at times highly excited and intractable; others morose and reserved, as if, in the sort of twilight intelli-

gence they retained, their minds were engrossed with one train of ideas, or some painful remembrance of the past.

“Among others we have a remarkable case of this character in a homicide, who for five years, with only three exceptions, where he suddenly made some short and angry observations, has maintained an unbroken silence; he smiles occasionally, if he hears anything amusing, but never condescends to laugh. This man will stand with his head bent to his chest for four or five hours together in the same exact position, and resist being moved simply by the *vis inertiae*; yet he goes, when called, to his meals, and behaves most correctly at table. At the female side too, there is an infanticide, very taciturn and reserved, with a strong predisposition to self-destruction; her attempts are always with broken glass, which she endeavours to secrete; scissors and knives may be safely entrusted to her. A gloom hangs over this woman; her conversation is most rational—in the one object alone, and by the one mode of attaining it, is her insanity displayed. We mention these individual cases as characteristic of many, and thus illustrating to your Excellency, on subjects more or less professional, that general information which we would desire to convey.

“With the exception of two attempts at life, but neither fatal, we have had no serious cases to refer to officially since the date of our last Report. In the first instance, a lunatic inflicted a deep wound on his own neck with a razor; in the second, a convict from Spike Island, at the time deemed quite harmless (but who has since evinced a cold, malignant disposition), stealthily getting behind one of his companions, whose verses and sarcasms give occasional annoyance, struck him on the head with a piece of iron he had secreted for the purpose, causing a large compound fracture, through which a considerable quantity of brain was discharged. Dr. Harrison, the Visiting Physician, was in immediate attendance, and removed several pieces of depressed bone; after remaining comatose for four days, the man recovered rapidly, without an unfavourable symptom, and without the slightest change or remission of his insanity. By a strange coincidence this patient was noted for his memory, and the accuracy with which he repeated a long string of words the most incongruous. The wound, with a considerable loss of brain, was (phrenologically speaking) exactly in the region of the organ of memory; his recollection, however, continues quite unimpaired.”

The remarks of the Inspector with regard to private asylums in Ireland we publish in another part of our Journal.

The following is a Return of Patients in Private Lunatic Asylums on 31st December, 1854, classified as to Professions, &c.

	Males.	Females.
Married	48	57
Single or Widowed	204	150
Total	459	

PREVIOUS PROFESSIONS OR OCCUPATIONS :

Army	35
Navy	3
Church	19
Law	18
Medicine	6
Students	15
In Trade	36
Other occupations	49
Farmers	16
No occupation	272

Total in Asylums . . 459

	Males.	Females.
Found Lunatic by Inquisition . . .	19	7
Sent by Authority of Friends . . .	233	200
Total	459	

The appendix contains a vast body of interesting and important statistical and tabular statements, apparently drawn up with great care.

REMARKS ON THE RELIGIOUS PERSUASION, DEGREE OF EDUCATION, AND EMPLOYMENTS OF PERSONS AFFECTED WITH INSANITY.

BY JOHN WEBSTER, M.D., F.R.S.,

Fellow of the Royal College of Physicians, &c.

TWELVE years ago, the managing committee of Bethlem Hospital adopted, at my recommendation, a series of tables illustrating various important facts respecting the lunatics admitted and placed under treatment in that institution. Since the period mentioned, these valuable and instructive records have been regularly continued, and now constitute highly useful documents for reference. During the period embraced by the elaborate statistical returns thus accumulated, 3599 insane patients have been admitted into the curable wards of the above named establishment, all being only recently attacked with mental disease. Of these, the largest proportion were females, the exact number of that sex being 2074; whereas only 1325 were male lunatics, the ratio thus amounting to fifty-six per cent. more of the former than the latter division; which statement conclusively demonstrates the greater prevalence of insanity among women than men, throughout the general metropolitan population.

Much interesting information may be derived from a careful examination of the above tables; and if the aggregate facts are properly arranged, some curious practical deductions may be thereby likewise obtained. Believing a few cursory remarks in reference to the religious persuasion, degree of education, and different employments of the numerous lunatic persons of both sexes received at Bethlem Hospital, during the last twelve years, will not be considered unimportant, or out of place in the *Psychological Journal*, I would therefore beg leave to direct its readers' attention to the subject now proposed for discussion. Of course, it is impossible to deduce, from present data, any special inferences

in regard to the comparative frequency of lunacy, amongst different religious persuasions: its prevalence in ignorant contrasted with persons of education: or the influence which particular kinds of employments may actually exert upon individuals. Some general approximation to the truth can only be expected. Nevertheless, the large array of figures which have been thus brought into juxtaposition, cannot prove otherwise than extremely useful to every investigator.

Influenced by such motives, I will therefore proceed to examine the part first proposed for inquiry; namely, the religious persuasion of lunatics admitted. As might be expected, the largest number belonged to the Church of England, nearly two-thirds, or seventy-three per cent. of the whole admissions being members of that religious community. More females than males were however enumerated in this category, or 972 of the latter sex to 1559 of the former, and so making a total of 2531 individuals belonging to the national religious establishment. The next most numerous body were Independents, of whom 234 came under treatment, 81 being males, and nearly twice as many, or 153 females. Wesleyans follow: the total of that persuasion being 144 persons, comprising 57 of the male, and 87 of the other sex. Baptists appear next in the scale: these comprise 129 persons, or 50 males and 79 females. Afterwards Roman Catholics, of whom the total admissions reached 120, giving 50 male and 70 female lunatics. Then Presbyterians: 73 members of that body having been received, the sexes being nearly equal, or 34 males to 39 females. The Jews occupy the next position: 47 Israelites, of whom the sexes were almost the same in number, or 23 male to 24 female lunatic patients being included in the division. Dissenters supplied only 17 individuals, 10 being male, and only seven female patients; whilst the remainder, although comprising varied and even very opposite shades of religious opinions, were, however, few in number taken specifically. Thus, six were Unitarian; five being men, and only one woman. Plymouth Brethren also supplied six patients, of whom two were males and four females. Again, Lady Huntingdon likewise furnished six proselytes, two being male, and four female lunatics. Deists and Atheists actually amounted to five persons, but all men. Swedenborgians gave two males. Ranters, one patient of each sex. Quakers occupied a similar position. Moravians supplied one male. Sandemanians, Socialists, and the Greek Church also one male patient each. And lastly, Antinomians, Brownites, and Irvingites, were respectively represented by one insane female belonging to each of these so-called religious communities. The remaining 27 male and 43 female lunatic inmates treated at Bethlem Hospital, making a total of 70 persons, being reported as "not ascertained" in respect of their specific denomination.

The mental culture, or degree of education, which the large number of persons comprised in the present inquiry had acquired, previous to becoming insane, and so rendering them proper subjects for confinement, now comes under review; and upon this interesting question some curious information has been acquired. Of the total 3599 inmates received into this institution, 208 were lunatics who had previously obtained a superior education, and some even were exceedingly accomplished; the sexes being nearly equal, or 102 males to 106 females. With reference to sex, the proportion of highly educated persons was greater amongst men than women, seeing the ratio was one in every thirteen of the former, but only one in every twenty of the latter division of inmates. Patients whose education was reported good, that is, could both read and write, amounted altogether to 890 individuals, or one-fourth of the entire number admitted. The figures representing each sex being almost similar, or 425 males to 465 females, which however gives respectively one in every three male lunatics admitted able to read and write, whilst only two in every nine women had even acquired that limited education.

Those who could only read, but were wholly incapable of writing, both sexes included, amounted to the very large number of 1887 persons, making not less than 52·40 per cent., or upwards of half the entire admissions. Here, again, the females appeared even more ignorant than the male patients, 1181 of the former being able only to read, whilst 706 males came within that category. Lastly, 417 human beings, out of 3599 once endued with reason, but now deprived of that inestimable blessing, had never received any kind of mental education whatever, being steeped, ever since birth, in the most crass ignorance, and wholly incapable either of wielding a pen, or still less knowing the alphabet.

So lamentable a circumstance, that nearly one-eighth of the aggregate patients admitted into this charity, where parish paupers are seldom received, and the recipients of its bounty are, in a large proportion, connected with tradesmen or the mechanical classes of society, should be found in such an abject condition as neither to know how to write nor even to read, speaks trumpet-tongued against the negligence of parents, guardians, and parochial authorities; whilst it clearly shows much remains to be accomplished ere popular ignorance shall be entirely dispelled. It is also remarkable that the number of females who were thus classified, or living hitherto, so to speak, in perfect Cimmerian darkness, was much greater than amongst males, the amount being 325 females, or 15·66 per cent. of the entire admissions; whereas, only 92 male lunatics were similarly situated, being nearly seven per cent., or under half the ratio recorded amongst the other sex. Such facts are exceedingly interesting; but whether insanity is more liable to affect ignorant minds, and those never improved by any mental culture, cannot be authoritatively asserted from the data thus hitherto obtained, although the present statements tend, in some measure, to prove such an inference; seeing so many persons, especially females, whose intellectual faculties had never been cultivated, nor attempts made to enable them to acquire knowledge in the usual manner, come within this category. It seems, however, a generally received and well-founded opinion, that persons of education, or individuals whose intellects have been properly trained, especially in the exact sciences, and imbued with practical information, but not weakened through inane absurd accomplishments, however fashionable, or their feelings excited by meretricious systems of teaching, are far likelier to continue mentally sane, than parties belonging to the uncultivated and ignorant classes. Psychologists may therefore fairly infer, even from the facts now reported, that ignorance promotes insanity; and the human mind, which has not been subjected to any kind of discipline, is more apt to be afflicted by mental disease, than, comparatively speaking, where parties are differently constituted.

The remaining point to which I would now specially direct attention, is the kind of occupation, or previous employment, of the different insane patients placed under treatment at Bethlem Hospital. The list is both large and curious; whilst it demonstrates, although several handicrafts give few victims, nevertheless, amongst various occupations contained in this table, the sufferers from mental alienation were more numerous in some employments than in others, respecting which feature I shall afterwards append one or two general observations, chiefly based upon facts the subsequent document contains.

No. 1.—Occupations of Male Patients.

Accountants	2	Authors	3	Blind Maker	1
Actor	1	Bakers	33	Bookbinders	9
Agents	6	Barristers	2	Booksellers	5
Architects	7	Basket Makers	2	Brassfounders	3
Army Clothier... ..	1	Billiard Marker	1	Brokers	12
Artists	8	Boatbuilders	4	Brewers	3
Attorneys... ..	4	Boiler Maker	1	Bricklayers	13
Auctioneer	1	Blacksmiths	14	Brush Makers	2

Builders	4	Gasfitter	1	Porters	25
Cane Maker	1	Glass Cutter	1	Postmen	3
Carpenters	81	Glover	1	Printers	18
Carriers	3	Goldsmiths	10	Publicans	25
Carvers and Gilders ..	6	Greengrocers	7	Railway Servants ..	4
Cabmen	6	Grocers	28	Relieving Officer ..	1
Carmen	3	Hair Dressers	12	Rope Maker	1
Cellarmen	2	Hatters	8	Saddlers	5
Chair Makers	4	Hawkers	16	Sailcloth Maker ..	1
Chemists	8	Hosiery	2	Sailors	29
Cheesemongers	6	House Decorators ..	2	Salesman	1
Chinamen	2	Ironfounder	1	Sawyers	11
Clerks	83	Ironmongers	3	Schoolmasters	27
Clergymen	9	Japanners	2	Servants	32
Clothier	1	Labourers	80	Shirt Cutters	2
Coach Makers	9	Land Surveyor	1	Shoemakers	48
Coachmen	6	Last Maker	1	Shepherds	3
Coal Dealers	5	Lath Renders	4	Shopmen	10
Collar Maker	1	Law Stationers	2	Silk Merchants	2
Commercial Travellers ..	7	Law Writers	6	Slater	1
Confectioners	2	Leather Dressers ..	4	Soldiers	2
Contractor	1	Lighthouse Keeper ..	1	Spring Maker	1
Cooks	2	Lightermen	4	Sugar Refiner	1
Coopers	6	Livery Stablers	5	Surveyors	5
Copperplate Printer ..	1	Mast Maker	1	Stationers	2
Cork Cutter	1	Medical	22	Stokers	2
Corn Chandlers	4	Merchants	2	Stonemasons	2
Corn Dealer	1	Miners	2	Storekeeper	1
Curriers	11	Millers	3	Students	4
Cutler	1	Millwrights	2	Tailors	35
Dairymen	3	Musicians	17	Tablecloth Maker ..	1
Dealer in Hides	1	Newsvender	1	Tanner	1
Dentist	1	Oilmen	2	Tidewaiters	2
Drapers	4	Officers of Army ..	7	Tinmen	3
Draughtsman	2	Officers of Customs, &c.	3	Tobacconists	12
Drovers	2	Officer of Navy	1	Truss Maker	1
Dyers	2	Old Clothes Dealers ..	7	Upholsterers	3
Egg Merchant	1	Omnibus Proprietor ..	1	Watchmakers	11
Engineers	8	Opticians	5	Waiters	6
Engravers	11	Painters & Plumbers ..	25	Weavers	11
Farmers	34	Parish Clerks	2	Wheelwrights	2
Fishermen	3	Pattern Designers ..	4	Whitesmiths	2
Fishmongers	16	Pianoforte Makers ..	8	Wine Merchants ..	2
Flower Makers	3	Pilot	1	Wood Cutters	2
French Polishers	3	Pipe Maker	1	No profession	21
Fruiterer	1	Plasterers	3	Not ascertained ..	84
Furriers	4	Pocket-book Maker ..	1		
Gamekeeper	1	Policemen	14		
Gardeners	16			Total	1325

No. 2.—Occupations of Female Patients.

Annuitants	2	Confectioner	1	Fur Dresser	1
Artists	3	Cooks	5	Glovers	2
Baker	1	Corn Dealers	3	Governesses	62
Barnmaids	5	Dairywomen	6	Greengrocer	1
Book Folders	2	Dressmakers	148	Hat Liners	2
Bonnet Makers	12	Eating-house Keeper ..	1	House Agent	1
Button Coverer	1	Embroiderers	3	Housekeepers	10
Carrier	1	Envelope Maker	1	Hawkers	2
Charwomen	7	Flower Makers	3	Keeper of an Office ..	1
Clothworker	1	Furniture Brokeress ..	1	Lace Makers	7

Lady's Companions...	2	Shopwomen	8	Wives, Widows, and	
Lady's Maids	14	Silk Winders	3	Daughters of Pro-	
Laundresses	31	Singer	1	fessional Men, Offi-	
Linendraper	1	Stay Makers	3	cers, and Merchants	47
Lodging-house-keepers	25	Stock Maker	1	Wives, Widows, and	
Map Colourer	1	Straw Plaiters	2	Daughters of Clerks	
Midwife	1	Tambour Worker	1	and Tradesmen ..	582
Needlewomen	64	Toll-gate Keeper	1	Wives, Widows, and	
Nurses	26	Upholstresses	2	Daughters of La-	
Organist	1	Umbrella Maker	1	bourers, Servants,	
Paper Makers	5	Waistcoat Makers	2	and Mechanics ...	465
Pew Openers	2	Washerwoman	1	No occupation, or	} ... 164
Publican	1	Water Gilder	1	Not ascertained	
Servants	296	Weaver	1		
Shoe Binders	4	Wig Maker	1	Total	2074
Shopkeepers	17				

Looking at the preceding table in the aggregate, clerks constitute the most numerous body of male patients admitted, whilst labouring under insanity. Next carpenters, labourers, and tailors; then turners, grocers, and schoolmasters; amongst the latter of whom there were twenty-seven instances. The circumstance seems rather remarkable, that so many teachers of youth as the number mentioned should have become insane, seeing schoolmasters are by no means a numerous fraternity. This is proved by the fact of there being only 1676 persons returned as so engaged by the census of 1851, and resident within the metropolis. Of course, it cannot hence be positively asserted that those engaged in teaching are more liable to become victims to mental disease than in some other occupations: as, for instance, medical practitioners, of whom twenty-two examples are reported to have been received into Bethlem Hospital, the total amount of physicians and surgeons being 3959 in London, or upwards double the number of schoolmasters. Again, thirty-four turners were admitted: and as this class is even less numerous than the latter, or only 1317 throughout the metropolitan districts, it seems not overstraining the argument to assume that individuals dedicated to this kind of employment become oftener insane than various other parties occupied in a different manner. For example, only thirty-five tailors are stated to have been received into the insane wards of Bethlem, notwithstanding that body of workmen is very numerous; there being not less than 20,257 in London, or more than fifteen times the number of turners; nevertheless, the total cases were almost identical.

Much the same kind of reasoning may also apply to servants, of which thirty-two cases of insanity are recorded; and as this class comprises 21,507 individuals, if those at inns are included, it becomes a circumstance worth noting that so few lunatics were comprised in this division. At all events, notwithstanding such inferences may appear rather more speculative than yet proved, the previous table certainly demonstrates, mental disease oftener supervenes amongst certain classes of workmen, compared with others, whose occupations are of a different description. In respect of turners, although a very limited body of artisans, it is somewhat singular, the cases registered were so numerous; and the above fact would almost warrant the conclusion that their particular kind of occupation apparently exerts an influence in producing these attacks. But whether through the rapid rotatory motion of the machinery used, and so exciting the brain, from the uniform attention required on the workman's part, or by the monotonous, but constantly changing aspect of the articles they make, deserves further attention and much additional experience before speaking upon the subject with confidence.

Amongst the female patients, the most numerous division of particular occupations is that of servants, of whom 296 cases attacked by insanity are so specified. Dress-makers, which includes milliners and needlewomen, also

constitute a very numerous class; 212 examples being thus designated. Needlewomen and young girls employed in the sedentary occupation of sewing, and who are often very inadequately remunerated, appear much to be commiserated. That mental disease is by no means an uncommon occurrence amongst this unfortunate section of the female community, would seem undeniably demonstrated by the circumstance now mentioned. Another class of single women seems, however, even more predisposed to and afflicted by mental disease, namely, governesses: of whom sixty-two instances are recorded in the table; making nearly one in every thirty-three female lunatics admitted. Like schoolmasters, governesses are not a numerous body, speaking comparatively; and therefore the coincidence appears more singular, that both these classes, who are each engaged in training the rising generation, and also imparting knowledge to young minds, should respectively furnish so large a proportion of inmates to Bethlem Hospital; but why this remarkably similar result should happen is difficult of explanation. The anomalous condition in which governesses are generally placed, being neither ranked with domestic servants, nor usually allowed to associate with the masters or mistresses of the family where they reside, and are seldom permitted to mix in the ordinary society visiting the same domicile, whilst their own attention and time is constantly occupied in the harassing duties of teaching frequently wayward young girls, or noisy children, should be noted. Further, governesses being commonly women of talent and accomplishments, often reared in a different sphere to the one they then occupy, are obliged, in many instances, through family misfortunes, or poverty seldom occasioned by their own conduct, in order to earn a precarious livelihood, to accept appointments inferior in many respects even to lady's-maids or housekeepers. The latter are really servants, occupying their proper sphere, who generally never had enjoyed better treatment or experienced more prosperity, and are besides very rarely possessed of accomplishments or received a good education, hence, have their feelings seldom wounded from associating with individuals inferior to themselves; whereas, this too often happens in the case of parties under consideration. I scarcely know any class of society more deserving of sympathy than governesses, whether their anomalous social position be considered, or the frequency with which mental disease appears to supervene. Many afflicting cases of this description have been observed amongst the insane patients treated at Bethlem Hospital; and as similar examples are by no means rare in other institutions for lunatics, I have consequently been induced to enlarge upon such topics, in order to bring the question now discussed before the profession, and thus arrive at more correct deductions than the data here collected might yet seem to warrant.

Before bringing the present communication to a close, I would finally remark, that another class of females amongst whom insanity seems to have prevailed to some extent, considering their limited number as a distinct body, deserves a passing notice, namely, lodging-house-keepers. Of this body twenty-five instances are enumerated; and seeing the total lodging-house-keepers, male and female included, comprise only 553 individuals, throughout the metropolis, such a fact at least shows the ratio to be considerable. If, then, so many insane patients of that description come under treatment, the inference seems neither overstrained nor devoid of foundation, that females embraced by this particular division are oftener affected with mental disease than those enumerated within other categories; as, for example, midwives and washerwomen, only one instance of persons employed in each of these occupations being included in the previous table, although both these classes of women comprise rather a numerous body of individuals, throughout London and its immediate vicinity.

ON THE CONNEXION BETWEEN MORBID PHYSICAL AND RELIGIOUS PHENOMENA.

NO. 4 OF A SERIES.

BY THE REV. J. F. DENHAM, M.A., F.R.S., &c.

IN now proceeding to give classifications of the co-existing morbid physical and religious phenomena which have come under the writer's notice, it seems natural to commence with those relating to the department of faith, or religious belief; and consisting of scepticism or the incapacity of confidence in the first principles of religion, as one extreme; and of credulity, or the extravagance of religious belief, as the other. Beginning, then, with scepticism, I assume, as a maxim, that an acquiescent perception of all the primary truths, of at least natural religion, is the normal condition of the human mind:—or to use St. Paul's language, "that which can be known concerning God, is manifest *in* men, for God hath showed it to them, they know God, they perceive the righteous judgment of God;" so that, as he maintains, even the heathen were inexcusable in their abandonment of the true God, and idolatry; "because the invisible things of God are clearly seen, being intimated by the works of creation;"* or to use the words of Tertullian, "the human soul possesses the innate power of appropriating to itself, without any supernatural aid, all that may be known of the Divine being, by the works of nature;"† and, "for the first principles of religion, we need not appeal to a soul that has been bred up in a library and fed with academical notions, but to the soul that is *simplex et rudis, et impolita, et idiotica, illa ipsa de compito, de trivio, de textrino,*" &c.‡ Not a few, also, of the most learned and orthodox Christians have in all ages maintained that a natural affinity exists between the native sympathies of the human soul and all the primary principles of even revealed religion. Thus, for instance, Tertullian says, the soul is naturally Christian. "*O anima naturaliter Christiana!*"§ When, then, the natural tendency of the mind to religious belief is found to be suspended, it seems reasonable, upon the principles laid down in the preceding papers, to attribute the phenomenon to bodily disorder affecting the mind, either as occurring in the course of nature, or as occasioned by vice. The following observations will, however, be directed to the subject of what may be called innocent scepticism, or that kind of scepticism which appears to result from innocently occasioned bodily disease.

The first case I give from my memoranda is of the lapse of faith under extreme physical exhaustion. A man, fair complexion, of an excitable temperament, ordinary powers of mind, common education; humane, friendly and cheerful in disposition; of good moral character in all respects, previous to his last illness, although in early life addicted to intoxication, and having, then, also, been under medical care for insanity, the exciting cause of which was, however, believed to have been his excessive attachment to a female whom he married after the recovery of his reason, and by whom he had several children; became at the age of forty-two afflicted with jaundice, succeeded by dropsy. Before his illness, and for many years, he was remarkable for the earnestness of his religious faith, for ecstatic singing, chiefly of Wesleyan hymns, and for excited prayer, for taking journeys to hear popular preachers and to attend "missionary meetings," and particularly for his vehement dislike to the Calvinistic doctrine of unconditional election to eternal life, and its consequent doctrine of reprobation.|| During the first part of his illness he

* Rom. i. 19—32.

+ De Testim. An. cap. 5.

‡ De Testim. An. cap. 1.

§ Apol. c. 17.

|| "Calvin's Institutes," chap. 23.

retained his religious belief, &c. He was tapped several times by a regular surgeon, and finally by an ignorant empiric, to whose care he waywardly resorted, and who cut an artery, thereby occasioning a great effusion of blood with the serum. *From the time of that operation* he exhibited a total repugnance of mind to all religious subjects whatever, could not endure prayer, would not allow the Scriptures to be read to him, argued, with what seemed in his case an extraordinary acuteness, against the benevolence of the Deity; maintained that he was reprobated of God, and predestinated from all eternity to everlasting destruction, or, that, if God had so reprobated and predestinated only one individual,—that individual was himself. He manifested also the most inveterate dislike to his wife, and even assailed her with the grossest abuse, could not endure the sight of his children, and suspected every one that approached him of some evil intention. His memory and judgment in his affairs remained comparatively unimpaired. He continued in this state for nearly two months; at last, and only a few minutes before he expired, he said, “Who can tell but that I may be saved?” The *post-mortem* examination disclosed a most extensive disorder of the liver, and the bowels enveloped with clotted blood. The surgeon remarked on the occasion, “This man was bled to death.” His children all died early, of either diseased liver or fever.

Case 2, of a similar nature, but having a more pleasing termination, was of a lady, of fair complexion, excitable, and delicate constitution, devotedly attached to her husband and children, well-educated, intelligent, exemplary in conduct, and piously disposed, who, after a long and dangerous confinement, complained with distress of mind bordering upon delirium, of having no love or even reverence towards God, nor belief in the Scriptures, nor natural affection to her children, nor regard for her husband. She also maintained that her “spinal marrow had become severed, and that she had distinctly felt it part in sunder.” After a residence of a few months at the seaside, receiving careful medical treatment, she completely regained all her religious confidence and correct feelings. Her delusion also subsided.

Case 3 is of a widow, about sixty years of age, dark complexion, sensitive feelings, imaginative mind, well-educated, humane, of excellent moral conduct, had had no children, was habitually dyspeptic. In early life she had imbibed high Calvinistic notions, had been accustomed to attend popular preachers of such notions, relied greatly on which she called her “experience,”—became, about fifteen months before her death, the subject of intolerable remorse of mind, along with visibly declining health, and her removal from the metropolis to a lonely country town—accused herself of having committed every sin, of being the author of all the natural and moral evil in the universe, and thought she was doomed to live till she had repaired it all; that she was a demon, that she killed every one that died, that she felt that she was killing them; fancied that she heard thieves in the house at all hours, or that the house was on fire; heard voices; pronounced “all her experience a delusion;” refused prayer, “because God had never been her God,” or interrupted it with despondent expressions; exhibited other decisive symptoms of insanity: died without any mitigation of her state of mind. According to the opinion of her medical adviser, the digestive organs were totally impaired. It was said that insanity in lighter shades, of a similar nature, had shown itself in her mother.

Case 4 is of a younger female, mother of several children, delicate constitution, limited education, little native vigour of mind, devout, and of irreproachable conduct; during her long and fatal illness expressed a most comfortless state of mind in consequence of her total loss of faith, and of all regard to religion, prayer, &c. The utmost admission she could make, after every assistance had been rendered to alleviate her distress, was thus stated by herself: “I think that I have a wish to have a wish to believe, &c.”

Case 5 is of permanent scepticism unattended with any *marked* indication of disease. A man forty-four years old, dark complexion, hypochondriacal temperament, uneducated but shrewd; brought up among the Wesleyans; violent when provoked, otherwise a man of good conduct:—working at one of those sedentary and manual trades whose followers furnish a large number of sceptics and fanatics—his mind always musing on abstruse topics, seemingly incapable of forming or retaining any conclusions, inclined to listen to instruction, and to speak on religious subjects without the appearance of guile or vanity. His naturally morbid temperament, and the want of sufficient mental occupation along with his handicraft, seemed to have combined in producing what Paley calls “a debility of mind that can trust to its own reasonings in nothing.”

Case 6. A young man, florid complexion, sensitive, meek disposition, commercial education and pursuits, much respected for his moral conduct, had once been the subject of emotional piety, complained of incapacity of faith, of religious and moral indifference, hopelessness, inability to pray, &c. He was subject to habitual depression of spirits, seemed absent at times, and presented the appearance of determination of blood to the head. Continued so many years.

Case 7. An elderly man, who had been successful in business, the head of a large family, always respectable in moral conduct, of weak reasoning powers, emotional feelings, Calvinistic notions, extreme self-abasement, a zealous attendant on Calvinistic preachers, and at the meetings of religious societies of the same class,—after an epileptic fit retained the use of his faculties and his knowledge of general subjects, but manifested extreme suspicion of everybody, intense anxiety about money, along with a total indifference to all religious topics and objects, and even a forgetfulness of the religious phraseology which had once amply tinged his general conversation; became imbecile and died.

Case 8 is of a converted Jew, fair complexion, about thirty-two years of age, belonging to a sedentary and solitary occupation, intelligent, but not highly educated, amiable in disposition, and correct in morals; supported during his last and lingering illness (atrophy) by respectable Christians, who fully believed in his sincerity and good deportment. He retained every quality that entitled him to the support and esteem of his friends through many months of his disorder. During the last stage of it, which was accompanied with febrile symptoms, he disclaimed his adopted faith, and his faith in all religion. “Could not believe that he had deserved so much affliction, or that it could be needful, or useful to him. Could not believe in the goodness or providence of God.” Declared that he had not been sincere in regard of his conversion; and that, though he had no real faith in any religion, he would die in the profession of that of his forefathers; denied that he had any need of repentance, exhibited great irritability and ill-temper, raved, blasphemed: delirium and death ensued. I have often seen a tendency in persons during their last illness, to return to the religious opinions in which they were bred, when different from those which they had adopted at a subsequent period: and what may, perhaps, be partly owing to the same causes, a resumption of their provincial *patois* and pronunciation, although it had been disused for many years.

Case 9 would include instances of persons of melancholy temperament, of sedentary occupations and habits, whose minds have habitually fallen, while working at their employments, into sombrous reveries of a religious nature. They have described their minds as “always working on such subjects;” and as, according to their belief, continuing to work on them during their sleep, because conscious of them as soon as they awoke in the morning. They have seldom seemed able or inclined to remove such a morbid state of mind by actual inquiry or instruction, their amount of information has appeared small, nor were they competent to state distinctly the causes of their mental uneasiness.

Case 10 would comprehend persons who have either entered upon theological

inquiries in a state of ill health, or have pursued such inquiries so intensely as to induce disease. The progress of their malady has been marked by an increasing distrust of all tradition, a disregard to all authority, want of confidence in all common and intuitive principles, and an anxiety to examine the very foundations of all human belief and knowledge. The usual termination has been a return to health, and a discontinuance of their unregulated passion for inquiry, or an increase of disease, and of that passion, the decay of the faculties, and death.

The foregoing cases are given as *types* or representations of the chief *kinds* of religious scepticism attended with morbid physical phenomena, each of them, however, comprehending under it numerous diversities and modifications. I beg to offer the surmise that in most, if not all of such cases, religious belief, or at least the capacity of it, may still exist, but that the morbid physical feelings may disguise or distort it to the mind's own apprehension, or rather that those feelings may be mistaken by the mind for its own perceptions—that they are, in fact, simply cases of what may be called scepticism of the feelings. How far physical disturbances may suggest ideas, and even absurdly consistent trains of such ideas, may be seen in the extreme case of them, in which the patient *hears voices* uttering entire sentences, consisting of persuasions to evil deeds, or assailing him with abuse, and accusing him of crime, &c., depreciating the character and conduct of friends and relatives, blasphemous or obscene, but which from their being attended with fever or bodily disorder, and ceasing with its cessation, clearly indicate their physical origin. The endless yet regular repetition of the same things by such voices would seem to indicate their connexion with a disordered circulation. I have frequently met with such distressing cases, not, as far as I could learn, arising, as in the case of *delirium tremens*, from the abuse of spirituous liquors, but generally accompanied with deafness and the peculiar expression of the eye which indicates an oppression or a too high temperature of the brain. It is certain that morbid bodily states suggest corresponding ideas in dreams, and that “a natural indisposition and an imperfect sense of the beginning of a disease may vex the fancy into a symbolical representation; for so the man that dreamed he swam against the stream of blood had a pleurisy beginning in his side; and he that dreamed he dipped his foot in water and that it was turned to a marble, was enticed into the fancy by the beginning of a dropsy.”* Is it then unreasonable to attribute to the action of bodily disease the same “symbolical representation” to the mind of morbid religious perceptions during the waking hours of the invalid, when his faculties are generally more or less in a dreamy condition?

In now proceeding to consider the opposite extreme—credulity, or extravagant religious belief—it may be premised that it is rarely found unassociated with a disuse, or distrust of the reasoning powers, both which are indications of bodily disease, (or infirmity,) or with a deficiency or neglect of mental culture and mental employment, which also tend to produce it, or with positive indications of diseased heart or brain. Its collateral symptoms are credulity respecting some or all other subjects, timidity, self-neglect, insensibility to moral obligations, and an instability of attachment to friends and other objects. It is also well known that vice of all kinds tends to produce general and even religious credulity. Vicious persons are often credulous and superstitious. Idolatry is throughout the Scriptures represented as associated with both vice and mental fatuity.

The following remarks will, however, be directed to the phenomena of credulity as associated with innocent bodily disease. The chief characteristics in such cases are,

1. Unsteadiness of religious opinions, &c., and a facility of passing rapidly to opposite extremes, from reverence to irreverence, and, what is more to be

* Bishop Jer. Taylor. Sermon 3, on Godly Fear. Part iii.

deplored, from a state of religious fervor to the commission of the grossest sins. The subjects of such mutations often complain of having an endless succession of the most diversified ideas and emotions. They are often charged with hypocrisy and folly by their more sober and discerning neighbours; but the interminable mutability and simulation of their physical feelings is the real cause of their apparent inconsistency and extravagance.

2. Credulity often assumes the shape of an undue tenacity for correct theological opinions, "right views," as they are termed; but attended with indications of its morbid physical origin, such as an inordinate anxiety respecting other subjects, and its subsidence with returning health. This tenacity often amounts to an absolute monomania in regard of certain doctrines, especially regeneration as dissociated from Baptism, Divine influence, Satanic temptations, sin, the difficulties of salvation, &c. Upon examination it will generally be found to consist of a mere unintelligent dismay, passion, or excitement, connected with some exaggeration of truth, or absurdity.

3. Credulity often manifests itself in a blind and uncontrollable regard for certain performances, such as the mere reading of the scriptures at particular times, or of a certain quantity of their contents; a mechanical observance of the Sabbath, ceremonies, &c. Prayer is particularly a subject upon which the morbid mind concentrates its endless and inactive anxieties: and instead of regarding and employing it simply as "asking those good things we have need of," such a mind can only conceive prayer to be genuine when inspired, or offered with a certain peculiar kind of feeling, or attended with a certain intensity of feeling, and may continue even for many prayerless years to endure its own inconsolable regrets for being denied the gift of such feelings, or for its own inability to command them.

The physical theory of credulity I would offer is, that owing to the inverted action of the mind, the physical feelings are the objects of its attention, and are either mistaken by it for its own perceptions, or originate its perceptions; and that according as these feelings are elated or depressed, or permanent or fluctuating, or strong or weak, so will be the phenomena of superstition—that credulity is, in fact, the credulity of the feelings, and that the particular modification it will assume depends greatly on the nature of the bodily disease.

The practical inferences from the foregoing sketch would seem to be, that no safe conclusion in regard of the existence of religious faith or of scepticism can be derived from the feelings; that persons of a morbid temperament should avoid the study of theology; that religious education and instruction should chiefly be addressed to the understanding, and that the exercise of a sound and enlightened judgment should never be relaxed in regard of all religious subjects and duties, &c.

Where morbid physical and religious phenomena of the foregoing kinds are developed, the removal of them depends on the cure of the bodily disorder from which they arise. But since in all such cases the existence of organic disease is to be more than suspected, a total prohibition of everything that excites or promotes its action should be enforced: such as introspection or the examination of the supposed religious phenomena of the mind; all conversation on the subject of religion, except with "a learned and discreet minister of God's word;" reading or hearing impassioned religious compositions, &c.; the attention should be restricted to a few first principles of belief and duty, and constant occupation, both mental and manual, or rational and improving amusement should be provided. The writer begs to add, as a general inference from the subject, the humiliating but salutary and charitable tendency of pathological studies, and the indispensable importance of them to the clergy; for such studies serve to show that religious principle may exist under at least a neutrality of appearances:—to acquaint us with the merely physical and even

morbid origin of feelings which are too often admired and cultivated—to guide the faithful pastor in his efforts to promote the real welfare of his fellow-men, and to reconcile him to those discouragements which too often attend those efforts in proportion as they are wise and sincere.

INSANITY AND DEMONIAL POSSESSION.

BY THE REV. J. MAY, M.A.,

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It has scarcely been a matter of doubt that the Evangelists have recorded several cases of insanity. The best defined are those of the demoniac of Gadara, evidently an example of mania; and the boy brought to our Lord after the transfiguration, whose symptoms closely resemble those of epilepsy. These cases will not fail to bring to the minds of those conversant with the wards of a lunatic asylum, many patients to whom the descriptions might be applied with very little alteration. We observe in these accounts, especially that of St. Mark, a minute attention to details, which would lead us to infer that the writers would not add anything to their statements at all likely to diminish from their clearness and simplicity, or omit to convey an erroneous impression. Yet, in addition to the symptoms of insanity, they mention others which are designated as the effects of what is termed demoniacal possession. Thus, in the two above instances, one is said to have an unclean spirit, the other to have a dumb spirit. Now, regarding these as genuine cases of insanity, it would be a very interesting inquiry, what analogy existed between the insanity of these demoniacs and the simple insanity of our own time? An inquiry, be it observed, which does not necessarily involve or materially affect the much-controverted question of actual demoniacal possession. It was therefore with much disappointment that I found, on reading the article of Mr. Souter in your last number, which he headed with the question, "Does any Analogy exist between Insanity and Demoniacal Possession?" that he had confined the analogy to the title of his paper, and launched out into a few of the arguments usually brought forward by those who deny the supernatural view of this subject. While regretting that this nearly exhausted theme has been so brought forward, I crave permission to insert in your Journal a few strictures upon the arguments which Mr. Souter has adduced in support of his view of this question. Though differing from him *toto caelo*, I may be permitted to say that his paper is drawn up in a style and spirit which fully bear out the high encomiums which I have heard connected with his ability and character.

There is one point to which I wish to allude before I proceed to criticize the particular argument upon which Mr. Souter has relied. He has made a kind of protest against being considered rationalistic in his views, and I give him full credit for his orthodoxy; but he ought to know that if he adopts the line of reasoning used by the rationalistic writers, and even of the former and worse division of that school, he must not be surprised to be classed with their number. Those who are acquainted with the manner in which these theologians make the language of the Evangelists to mean anything they wish, or nothing at all, will recognise a leaf out of their book in the complacency with which Mr. Souter talks of Eastern languages and personification of influences, not, I am sure, to inculcate infidelity, but to support an opinion. In proof of this, I need only bid any one compare the explanation given by Eichorn and Michaelis of angelic visits, and other supernatural circumstances, with his treatment of this question. For instance, those writers would explain away the salutation

of Mary by the angel, by terming it an internal feeling of delight and joy at becoming a mother. Similarly, Mr. Souter says, "that a man is described by the Evangelist as uttering wild words, or as doing the deeds of madness; but the man's mind is not under his own control—an evil influence possesses him; therefore, his deeds and words are not attributed to himself, but to the evil power, or *δαίμων*." Perhaps an inference the very reverse of Mr. Souter's may be drawn from these words which may be regarded as showing, on the supposition of real possession, that the acts and words of the demon are considered as inseparable from those of the person possessed. Thus the man with an unclean spirit is represented, Mark i. 23, as crying, "Let *us* alone, what have *we* to do with thee, thou Jesus of Nazareth? art thou come to destroy *us*? I know thee who thou art, the Holy one of God." Were the argument a sound one, the fact of its identity with that of the rationalistic writers would not invalidate it; and my object in alluding to this identity is to point out to Mr. Souter, that he must be prepared to carry out this mode of glossing over the literal meaning of the words of the sacred historians to its full extent—a mode of interpretation which, whether in the hand of the former or latter branch of that school, tends to the utter subversion of the Biblical miracles, and, indeed, of the whole Christian system. It is true that he concludes with an appeal respecting the reality and greatness of the miracle of curing insanity, not being affected by the denial of demoniacal possession; but the pious warmth of that appeal must not be suffered to influence our judgment of the question before us; it is *ἔξω τοῦ πράγματος*. We must not be led by the circumstance that miracles are not denied, to think that this question is therefore not an important one. Truth should be the object of all inquiry, and we must be on our guard lest, finding our main position safe, we should be led by a plausible explanation of a difficulty to yield the outpost, and so admit utter uncertainty into the interpretation of the language of Holy Scripture. These remarks belong rather to Hermeneutics than Psychology; but if plain prosaic statements are not to be construed literally, it is manifestly impossible that we should ever arrive at the truth, and the object of revelation is nullified. Your readers are doubtless well acquainted with Archbishop Whately's "Historic Doubts." I would earnestly recommend the reconsideration of that *brochure* to all who are inclined to tamper with the plain language of Holy Writ.

I now proceed to consider Mr. Souter's argument, and in the first place have to notice the fallacy which it contains. He begins with analogy, &c., then proceeds to show the similarity between the symptoms of certain demoniacs and the insane, and thence jumps to the conclusion of their absolute identity, and that demoniacs were merely lunatics. Passing over the want of connexion between the title and the matter of the paper, though I much regret it, I wish to call attention to the strange line of reasoning by which it is attempted to settle this much controverted question. The argument may be thus stated: So and So were demoniacs; but So and So were lunatics; therefore it is concluded, all demoniacs were lunatics; *i.e.*, from two particular and undistributed premises, an universal conclusion is drawn. But there is another fallacy in the argument: no notice is taken of the fact, that even if all demoniacs were lunatics, it would not prove that they were simply lunatics, or that there was no actual possession. Mr. Souter, indeed, speaks very eloquently of our Lord's power over mind being shown by the cure of insanity, as well as over body by the healing of bodily diseases. The cure of lunatics at his word would certainly be an illustration of our Saviour's power over mind, as the healing of bodily diseases was of his power over the bodily frame; but we have no right to insist on the necessity for our Lord's doing anything especially to prove the possession of such a power, which, moreover, is equally manifested by the cure of the insane demoniacs, as it would be by the cure of persons who were merely insane. The sphere of duty in which

Mr. Souter so ably labours, may render the miraculous cure of lunatics peculiarly interesting to him; but the absence of any case of madness, except when connected with demoniacal possession, would not disprove our Lord's power over the minds of men. Nor does the eloquent review of the condition of the Jews at the period of our Lord's sojourn upon earth, as being likely to be productive of many cases of insanity, assist his argument. I am not quite sure, indeed, if such a state of things would be attended by such consequences upon the adult population; it is not the hardened and violent, but the gentle and timid, on whose minds state troubles act generally with the most fatal influence. As in the case of the first French revolution, the terrors of the mothers stamped their dire effect upon their offspring in the form of idiocy or epilepsy; but among grown-up persons, I believe it was not found that any particular increase in the number of insane was produced by the troubles of the time. Doubtless, there were many lunatics when our Saviour was on earth, whatever may have been the cause of their malady; some, at least, of these were brought to Christ, and we are told He cured them. The main cause of their insanity was most likely that which Mr. Souter also mentions, "the unbridled licence of lust and sensuality." In some, this brought on bodily ailments, and led, on their being cured, to such an exhortation as, "Go and sin no more, lest a worse thing happen unto thee;" in others, it was followed by epilepsy, or mental disease, or brought them under the power of Satanic influence, as in the case of the demoniac of Capernaum, who had a spirit of an unclean demon. (St. Luke).

Mr. Souter very properly rejects the summary mode of getting rid of demoniacal possession, by saying that our Lord and his followers described the malady in such terms out of regard to the prejudices of the Jews, and owns that this is neither an adequate nor a fair reply to the difficulty. He then gives us his own view of the matter, that persons afflicted in mind were termed *δαιμονιζόμενοι*, because all evil was the work of the devil. Now I think it will be readily confessed, that whatever opinion the Jews held respecting demoniacal possession, our Lord did not only not undeceive them, but by his words and actions must have corroborated them in their belief. The Jews themselves, we have every reason to believe, considered the possession as a real one. Josephus relates a case of exorcism in which the *δαιμόνιον*, after going out of a man, overturned a vessel which had been placed as a test of his expulsion. This, though probably an instance of legerdemain, shows the state of opinion on the subject. Josephus himself considered that the *δαιμόνια* were the spirits of wicked men, but their actual possession of the demoniacs was not in the least doubted by him. The more common opinion was, that they were wicked angels, *i.e.*, devils. This latter opinion was held by many of the ancient heathen, who believed that there were some bad demons, who had never been men, and who led men into the commission of vice (Plut. Dion.). Xenophon uses the word *δαιμόνια* in the sense of gods, *θεοὶ* (Memorabilia). Cicero regarded the *δαιμόνες* as inferior gods, or lares. The earliest Christian writers had seldom occasion to allude to this subject, but when they do so, they take for granted the actual possession. Thus, St. Ignatius, in his answer to Trajan, declares that the heathen gods were really *δαιμόνια*, and speaks as of a matter not questioned of their actual possession of mankind: *Οὐδείς θεοφόρον ἀποκαλεῖ κακοδαίμονα· ἀφεστήκασι γὰρ ὑπὸ τῶν δούλων τοῦ Θεοῦ τὰ δαιμόνια, and again, τὰ δαιμόνια τῶν ἐθνῶν θεοὺς προσαγορεύεις πλανώμενος· εἰς γὰρ ἔστιν Θεός.* But the Jews holding the view of actual demoniacal possession, how can we deny that our Lord was guilty of countenancing their false notion, and confirming them in an error? that He did not foster superstition while professing to proclaim truth? Either demoniacal possession must be received, or our Lord and his apostles must have sanctioned a falsehood. Mr. Souter's explanation, therefore, proceeding, as it does, on the assumption that

our Lord's use of the word had a deep meaning, which, as I have shown, the Jews did not attach to the term *δαιμονιζόμενοι*, falls to the ground. But do the instances which are adduced really support this view, if we leave out of consideration the opinion of the Jews? We gather, indeed, from Holy Scripture the general fact that all evil is the work of Satan, and the consequence of the entrance of sin into the world: but our Lord healed many persons of various bodily diseases, and I think also of mental disease, whom the Evangelists do not say were POSSESSED. On the other hand, we find that this was predicated of certain persons who had mental disease, and certainly of one person also who had only bodily ailment: of this last, the poor woman who had been ill eighteen years, our Lord said that Satan had bound her; but what was in reality her case? She had *πνεῦμα ἀσθενείας* (so *πνεῦμα πύθωνος*, Acts xvi. 16), an evil spirit which afflicted her with bodily distemper. There is no doubt as to the synonymous use of *πνεῦμα* and *δαιμόνιον*; indeed, St. Luke says that the epileptic boy had a *πνεῦμα*, St. Matthew that he had *δαιμόνιον*: and in the same verse *δαιμόνιον* and *πνεῦμα ἀκάθαρτον* are both used by St. Luke to express the same evil spirit. It is, moreover, not unlikely that the secret sins of the boy had subjected him to the affliction (*ἀκάθαρτον*) with which he was visited. In examining this last case, a distinction will be observed between casting out the *πνεῦμα*, and the cure of the epilepsy. St. Matthew says, that at the rebuke of Jesus the demon departed out of the boy, and that "the child was cured from that very hour." St. Luke says, "Jesus rebuked the unclean spirit, and healed the child." A marked distinction is also made, in the accurate language of the Evangelists, between those diseases which are connected with physical causes, and those which are the consequence of Satanic influence: on the one hand, we have cases recorded of persons suffering from organic disease, *e.g.*, were deaf or dumb (Mark viii. 31, &c.); on the other hand, we meet with similar afflictions connected with demoniacal influence; thus, Matthew (ix. 32) makes mention of a man who was dumb, and again (xii. 22), of one who was both blind and dumb, both of whom he states to have been possessed; and further, it is to be observed, that neither these demoniacs, nor the *θυγατὴρ Ἀβραάμ*, were insane.

Mr. Souier's explanation is, that by *δαιμόνιον* is not meant a spiritual being, but only an influence; and in support of this view he asserts that we have no instance recorded of the possession of a person by Satan, the actual *διάβολος*, but only by *δαίμονες*, or influences proceeding from the Prince of Evil. This view cannot be sustained, inasmuch as by *δαίμονες* were always understood both by Jews and Christians, and also heathens — an opinion confirmed by our Lord and His apostles — real spiritual beings, and it is not supposed that Satan himself, for he is not omnipresent, but his emissaries, were the agents who caused the affliction which we are discussing. But further, it is evident that the Jews thought it possible for Beelzebub, or the Prince of the devils, to possess a man, and our Lord's remarks accorded with their view (Mark iii.); and we not only learn that Satan and Beelzebub were names of the Prince of Evil, but also, that to be possessed by Beelzebub was to be possessed by a *δαιμόνιον*, or *πνεῦμα ἀκάθαρτον* (Mark iii., 22, 23, compared with verse 30). The fact seems to be, *διαβολος* and *Σατανᾶς* are used to designate the powers of evil under their leader or head, while *δαίμονια*, and sometimes *δαίμονες*, and *πνεύματα ἀκάθαρτα*, and *πνεύματα τῆς πονηρίας* denote the subordinate spirits or *ἄγγελοι τοῦ διαβόλου* (Matthew, xxv. 4). And here I may draw attention to the propriety of Christ's casting out devils; for the Jews would certainly have asserted that His other miracles which attested His divine mission and authority, and the reality of which they could not deny, were wrought by diabolical instrumentality: but the fact of His casting out devils, and so destroying Satan's power, was a complete refutation of that objection. The question, "How can Satan cast out Satan?" was a *reductio ad absurdum* to which they could offer no reply.

I do not attach much importance to the distinction made between the *δαιμονιζόμενοι*, and the *σεληνιαζόμενοι* in Matthew iv., 24, independently of other considerations, but the wording of the whole passage is worthy of notice: in the first place (verse 23), the Evangelist distinguishes between *νόσος* and *μαλακία*, *i.e.*, between sthenic and asthenic diseases; he afterwards speaks of *βασανί*, *i.e.*, diseases attended with great pain. He then mentions three classes of afflicted persons, the *δαιμονιζόμενοι*, *σεληνιαζόμενοι*, and *παρλυτικοί*. Now, we must allow a distinction between the demoniacs and the lunatics, as well as between the lunatics and the palsied; and, in fact, we gather from the passage, that some persons who had bodily ailments, others who were insane or epileptic, and others also who were possessed with devils, were healed by our Lord. From other passages we learn, that some of these demoniacs had likewise bodily diseases, and others of them were afflicted in mind, or mad. On this last point I can add nothing to what Mr. Souter has said; he has ably demonstrated the identity between some of the actions of certain demoniacs and our own insane. But this is all that his paper proves; it does not show that all demoniacs were insane, much less that they were simply insane. Many of the actions attributed to them correspond to those of maniacs, &c.; but there are other circumstances mentioned which completely distinguish them from mere madmen. Their supernatural acquaintance with the person of Christ, their avowal of their wretched condition, &c., cannot be explained on the supposition of mere insanity. The Gadarene demoniac was doubtless a maniac, but as evidently, if language has any fixed meaning, possessed with an evil spirit or spirits. This case affords, perhaps, the most remarkable proof of the reality of possession. The ejected devils entered into a herd of swine, which, in consequence, ran violently down a steep place into the sea. Now, whatever we may attribute to the force of imagination, as explanatory of demoniacal possession, nothing of the kind could have actuated the irrational animals. Shall we say that evil influences went out of the man, or a kind of material madness, like an electric current, went out of the possessed and entered into the swine. How, on this mode of interpretation, shall we understand those words of St. James (iii. 19), *τὰ δαιμόνια πιστεύουσι καὶ φρίσσουνι*? I think no one would be satisfied to translate the Apostle's enthymem, "The evil influences believe and tremble."

Mr. Souter lays great stress upon the charges made by the Jews against our Lord: "Thou hast a devil," and their assertion concerning Him, "He has a devil and is mad." Respecting the former he says, "Our Lord's language appeared to them incoherent raving." Now this is a very different account from that which the Evangelists give of the effects of his discourses. On one occasion it was said, He "spoke as never man spake;" on another we are told, that the Jews could not answer His arguments; on another, that He spake with authority, and not as the scribes, *i.e.*, he taught with inherent wisdom, not by borrowed references; and on many occasions the wisdom which He manifested elicited their admiration, as well as put to silence all who ventured to dispute with Him. It was to be expected that his enemies should resort to the expedient of saying that he had a devil, for they thus endeavoured to account for the superhuman power of His arguments; but to attribute to him language merely irrational, or the acts of a merely raving maniac, would have carried with it its own refutation.

I have still to examine the assertion, "*δαιμόνιον ἔχει καὶ μίναται*." So far from this passage proving the identity of the expressions, demoniac and madman, if *δαιμόνιον ἔχειν* means merely *μίνασθαι*, with what absurd tautology is the writer chargeable who frequently uses both words? The conjunction *καὶ* distinguishes between the two terms, and also shows that the latter is an addition to, or an effect of, the other (see Passow at *καὶ*). The Jews thought the madness was the consequence of our Lord's having a devil; his friends, who also considered his mind affected, merely said *ὅτι ἔξῃστη*, for they did not

suppose him to be possessed. The disciples similarly said of Rhoda, *Μαίνη* (Acts xii. 15), but it would manifestly have been absurd to have said to her *δαιμόνιον ἔχεις*; so also when Festus said to St. Paul *Μαίνη*, there is nothing to connect it with possession; nor did the Apostle in his reply make any allusion to such a condition, (see also 1 Cor. xiv. 23, and 2 Cor. v. 13, where *ἐξιστημι* is used as the opposite of *σωφρόνειν*). The state of the case is this: the Jews, who had frequently told our Lord Himself that He had a devil, being anxious to dissuade the people from listening to His discourses, said to them *δαιμόνιον ἔχει καὶ μαίνεται, i.e.,* "He has an evil spirit which has produced madness, therefore it is not worth while to pay attention to such an one."

The signification of the word *δαιμόνιον* in the Septuagint version, alluded to by Mr. Souter, appears to me to be of some importance in reference to this question: but I submit that there it is *always* used in reference to spiritual beings, and not to mere influences, and gives the exact meaning of the Hebrew phrase. Thus Ps. cvi. 37, (Sep. Ps. cv. 37), *לֹא־יִשְׁתַּחֲוֶיִם* is rendered *δαιμονίους*, and so also Deut. xxxii. 17, "They sacrificed to devils, and not to God." These passages exactly correspond to St. Paul's words, 1 Cor. x. 20. It is indeed true that on one occasion Ps. xvi., (Sep. xcv. 5) the word *δαιμόνια* is used as the equivalent of *לֹא־אֱלֹהִים* or idols: but we shall see that its use on this occasion is exceedingly appropriate, and gives the spirit of the Hebrew text. The literal meaning of the word *לֹא־אֱלֹהִים* is something *false, valueless, nothing worth* as a dependence, and hence appositely idols. It is either formed from *אֵין* *nothing* or *no*, by reduplication of the *ל* to express intensity, or compounded, as some Rabbinical scholars have thought of *אֵין* and *אֵין* *no God, i.e. false God*, so 2 Chron. xiii. 9, idols are called *לֹא־אֱלֹהִים*. When not referring directly to idols, the word *לֹא־אֱלֹהִים* signifies worthless, but has still a reference to them. Thus, Job xiii. 4, "Ye are physicians of no value, *רְפוּעֵי־לֹא־אֱלֹהִים, i.e. physicians of false Gods: an idiomatic expression corresponding to the addition in Hebrew of God, for what is excellent and great. When nothing, in the sense of ne quid is intended, the word used is, נִכְרֵמָה. Thus Job xxvi. 7, "God hangeth the earth upon nothing," the Sep. has ἐνὶ οὐδενός. When לֹא־אֱלֹהִים refers merely to the images before which worship was offered, the Septuagint has εἰδωλον, or an equivalent; but in Ps. xvi. 5, where the word does not refer to images, but to the beings themselves to whom the service was rendered, they have correctly translated by δαιμόνια: "All the Gods of the heathen are devils." This is in accordance with the statement of St. Paul, who says, 2 Cor. viii. 4, "We know that an idol is nothing in the world," but adds, chap. x. 20, "The things which the Gentiles sacrifice, they sacrifice to devils, and not to God; and I would not that ye should have fellowship with devils." In the former place he shows the falseness of the heathen mythological divinities, such as Jupiter, Mars, Venus, as not being *in rerum naturā*: in the latter he was warning Christians against participation in idol feasts, for by so doing they entered into fellowship with *δαιμόνια, i.e. the powers of the kingdom of darkness. If δαιμόνια meant merely evil influences, I am at a loss to know how communion or fellowship could be held with them by mankind.**

I have thus endeavoured to show the weakness of the arguments used by Mr. Souter to disprove the tenet of actual demoniacal possession. I do not enter directly upon the evidence of the common view of the matter: this being founded on the plain and literal understanding of the language of Holy Scripture, the onus probandi rests with those who deny it. Until this can be done (and although attempted by some of the most able and learned writers, it has been found impossible to do so, except by upturning at the same time the

whole fabric of Christian truth), I am bound to believe that evil spirits actually *possessed* men about the time our Lord was upon earth. How or why such power was given to the powers of darkness is another question. What Mr. Souter has really shown, the conclusion which truly follows from his argument, is, that certain demoniacs were at the same time insane, and from this point commences the inquiry, "Is there any analogy between demoniacal insanity and ordinary insanity?"

II. I propose now to throw out a few hints on the manner of conducting this inquiry, and its probable results.

The first point which comes before us is, whether there is demoniacal possession in the present day. I am told that some eminent persons are of opinion that there is. The learned German commentator Olshausen, who himself considered that such influences were no longer exerted by the powers of darkness, nevertheless writes, "Yet it cannot be overlooked that many distinguished physicians, such for instance as Esquirol of Paris, are of the contrary opinion." He also refers to other authorities. I have not, however, been able to trace this opinion in Esquirol's work on Insanity. On the contrary, he appears to me not only to deny the reality of demoniacal possession, but to confound it with demonomania. He also says, "*Si c'en était ici le lieu, je prouverais que l'on s'est servi des aliénés pour rendre les oracles.*" I quite agree with him, however, in considering as monomaniacs the sorcerers and witches of later ages, when they were not impostors; but I submit that there is no resemblance between those wretched beings and demoniacs: they were insane, and often endured the most cruel torments, as they thought justly, because they confessed before their judges that they had intercourse with the unseen world, or possessed magical powers; charges which they were no more able to deny, though false, than the insane in our asylums to conceal the delusions which they entertain.* But of this monomania I propose hereafter to speak.

My own opinion I may state to be, that simultaneously with the cessation of the counterbalancing miraculous powers in the church, the power of Satan was restrained, and that the temptations and subjection which he exerts over many persons (2 Tim. ii. 26) are of the nature of ordinary influences, corresponding to the ordinary influences of the Holy Spirit, as distinguished from his miraculous or extraordinary gifts. Our investigation would be therefore reduced to the inquiry, whether the insane are ever affected by such Satanic influences in a manner at all analogous to the insane-demoniacs of the New Testament times?

In conducting this inquiry, I should at once dismiss all cases of pretension to present supernatural influences: such for instance as those of the heathen priests of Ceylon, the East Indies, Africa, &c., who, when consulted by their votaries, throw themselves into a species of ecstasy by violent exercise. Such modern inspirations I consider as traditionary superstitions derived from the heathen oracles before the Christian era, imitations of the real demoniacal possession of the Pythoness. For although I believe, with Fontenelle, that Christianity has shut up the heathen oracles, it is because Satan's power is now restrained, not because they were never real divinations. The Pythoness dispossessed by St. Paul was a real soothsayer; and I may use, respecting those heathen oracles, the words of the great Roman orator, "*Numquam illud oraculum Delphis tam celebre et tam clarum fuisset, neque tantis donis refertum omnium populorum atque regum, nisi omnis ætas illorum oraculorum veritatem esset experta.*"—(Cic. de div. I.)

I would also pass by all cases of demonomania as merely presenting particular forms of delusions, which differ very little from others which are of a like

* I am acquainted with an elderly female who is anxious that some one should cut her in pieces, because she thinks she has no soul, and that her body is only a phantom filled with wind.

subjective character; nor is the case altered when the delusion is connected with some organic defect, though a *primâ facie* view seems to show in these persons a resemblance to demoniacs, who were usually affected with disease. Thus, one poor woman who had an uneasiness in her throat, and difficulty in swallowing, fancied that Satan was in her; another, who died from a cancer, imagined that the distressing pains which she suffered were caused by devils; but these were manifestly mere forms of delusion, having no real resemblance to the cases of demoniacal possession.

I should also be disposed to omit from consideration many instances in which a totally different character was evinced by the insane from that which appeared natural to them. Some of these it has been thought could only be accounted for by the supposition of Satanic influence. A remarkable instance of this was once described to me by the person who had charge of the lunatic: a young female had been educated in a manner most likely to separate her from the very approach of immorality, having become insane uttered language of the most vile description, and spoke of scenes and actions too horribly obscene to be repeated; and the question was put to me, how could this patient ever have become acquainted with such language and such subjects, unless they were put into her mind by the great enemy of souls? Other similar cases might be mentioned, but I think this knowledge may be otherwise accounted for; *nec deus intersit, nisi*, &c., is a very useful rule: we ought not to turn to supernatural until we have exhausted natural sources of explanation. In the above case, it is not improbable that the evil was learned from domestics, or from books which they had inadvertently left within her reach; but I do think that such knowledge of evil, however acquired, may be used by Satan to harass and distress the mind, and that the admission, so to speak, within the unhallowed precincts of vice has been a source of temptation and evil suggestions, which in vain the voice of conscience has striven to check, till the troubled mind, having become too confused to distinguish between the temptation and the sin, yet horror-struck at the bare idea of the possibility of its commission, has given way in an unequal conflict, into which it had been originally led by the secret knowledge of evil.

So many persons of eminent virtue and piety have been struck down by insanity, that it will be evident that either there were no virtuous persons similarly affected among the Jews, or the word demoniac did not apply to all who were then insane. The insanity of the Cowpers and Halls, &c., so touchingly alluded to in Mr. Souter's paper, were ordinary visitations to which, like bodily diseases, all are liable who pass through this world of trial. Such cases, whatever may be the particular character of the malady, are by their very nature excluded from our inquiry.

I now proceed to show more directly the nature of the investigation, and with this view will recapitulate the most marked features of the New Testament demoniacs, and intimate what are the cases which furnish the analogy among the insane.

1. The first characteristic of the demoniacs was a superhuman knowledge.*

* Olshausen notices a resemblance between mesmeric clairvoyance and this knowledge of the possessed, and that the effect upon the nervous system is very similar in both cases. It is at present difficult to say whether those who run after spirit rappings, &c., are the dupes of a clever deception, or the victims of their own curiosity. That insanity may be the consequence of such practices, I have no doubt; nay, the effect upon some persons who have attended meetings for calling up the dead, leads one to fear the worst consequences in the more nervous temperaments. Who shall say whether the end may not be demoniacal possession as well as insanity? Esquirol notices the epidemic character of such delusions or practices:—"Démonomanie est quelquefois épidémiques: comme toutes les maladies nerveuses, elle se propage par une sorte de contagion morale et par la force de l'imitation."

This was evinced on many occasions by their recognition of our Lord and his Apostles, and the object of their teaching, and by divining or soothsaying. Their testimony to our Saviour's person was quite distinct from that given on various occasions by His disciples. The demoniac was rebuked, for Jesus would not receive his testimony; while the convinced disciple was pronounced blessed (Mark i. 24, 25, Matt. xvi. 16, 17). So St. Paul rebuked the Pythoness (Acts xvi. 17, 18).^{*} Of course, on the supposition that there is not at present actual possession, we shall not expect to meet with anything analogous to this super-human knowledge in the insane.

2. The next characteristic was a moral uncleanness, *ἀκαθαρσία*, implied in the epithet *ἀκάθαρτον*, so often conjoined with *πνεῦμα*. I am quite of the opinion of Olshausen, that the *δαιμονιζόμενοι* do not appear to be persons who had surrendered themselves up entirely with their whole internal life to sin, but those whose passions had burst the restraints which were imposed by light and knowledge and the dictates of a better will. The *πονηρὸς*, or wicked man, who had suffered evil to gain possession of his heart without resistance, whose conscience was itself seared or dead, was indeed under the dominion of Satan, but does not appear to have borne the character of the demoniac. This latter manifested a struggle with the evil which he could not shake off, but this very conflict within proved that there still existed a germ of life from which might spring the flower of faith. This better will hurried the poor Gadarene into the presence of Jesus, and caused him to fall down at His feet and worship Him, while the influence of the demoniacal agency was evinced by the cry of terror, "What have I to do with thee, Jesus thou son of God? art thou come to torment us, and cast us into the abyss of hell before the time?"

I think there will be found among the insane many who still thus *meliora probant*, but *deteriora sequuntur*. These, it is probable, having first been led astray by temptation, were affected with shame and remorse; or having been guilty of habits of secret sin, which they had not strength to resist, but which their conscience condemned, were goaded to despair and insanity. We do find indeed among the insane also some of those who have drained the cup of iniquity to the very dregs, the *οἱ πονηροί*; it was, however, when the body had been exhausted by excess, or when ruin, the consequence of extravagance, had started them in the face, and reflection only brought self-condemnation, that the bitterness of remorse seized on the debilitated faculties. But it is not among such cases we should expect to meet the analogy in question: in them, previously to actual remorse, there had been no internal conflict, whereas in the demoniacs there was a struggle between the principles of good and evil. In a Judas, or, to borrow Mr. Trench's illustration, a Klytemnestra, we have the obduracy of the *πονηρὸς*; while in the conscience-smitten Orestes, tormented by the dogs of hell into madness, the insane demoniac is aptly depicted.

3. Closely connected with the last mentioned characteristic and its physical consequence was some disease, the result of nervous debility which usually showed itself in the form of mania, epilepsy, or a palsied state of the organs of speech, hearing, &c. This last seems to have been a suspension of the use rather than a lesion or disease of the organs themselves. Such seems to have been the case of the epileptic boy; he had a species of convulsion which was a frequent accompaniment of the possession. I would wish carefully to avoid giving an opinion upon the medical view of this subject, but I may be allowed to state, that cases which prove the connexion between certain excesses and the above named diseases are alas! too common. It was not long since I met with a young man stricken down by melancholia, whose sinful habits as he afterwards owned, had been indulged in defiance of the rebukes of conscience, who

The language of the Gadarene demoniac evinced the same knowledge. The demons besought our Lord not to command them to go *εἰς τὴν ἄβυσσον*, i.e. not the sea, but *γέεννα*, the bottomless pit.

suffered subsequently to the removal of the melancholic symptoms from a kind of convulsive attacks very similar to epilepsy. He recovered, and is now quite well. This youth's case, and one or two others which originated in the same habit, strongly impressed me as bearing a very close resemblance to that of the boy who had the *τινεῖμα ἀκάθαρτον*.

4. The last feature in the character of the demoniacs to which I shall refer was a kind of double consciousness—a twofold self; the powers of darkness appear to have acted through the human intellect, but not so as at all times to destroy the personal consciousness; it has been described as the action of two souls on one mind. I would compare it with the miraculous influences of the Holy Spirit in the earliest ages of the Church, when the human intellect was supernaturally enlightened and guided for Divine purposes, though its individuality and personality remained. Many writers besides Dr. Guislain, whose remarks are quoted by Mr. Souter, have noticed a similar condition in the insane, and that it is sometimes remembered by the patient when the paroxysm has passed away. Mr. Trench, in his work on Miracles, quotes a testimony to this fact from a German Rationalist, who states that he had been told by an authority of a most unexceptionable character, a person of a cool and mathematical style of intellect, “that it had been satisfactorily proved to the highest Medical Board of Wurtemberg, that there are maladies in which the person has two *consciousnesses*, so that he is convinced that besides himself a second has forced himself into him.”* “Patients often, in more lucid intervals, have said that they were urged on by a second self even more powerful than their true self, to the commission of acts which they knew to be wrong, and utterly abhorred.” This admits of elucidation, though it cannot be easily accounted for. In sane persons, temptation acting on a free mind is either *ab extra*, or else it rises up in the thoughts in such a manner as not to be distinguished from the succession of ideas which spring up during reflection or meditation, and appear to be the man's own. In the insane, the impulses seem often to be more separately felt. In the former case, the temptation may be compared to forces in composition, which act only by a single impulse; in the latter, it resembles the same forces resolved, when each acts separately, and the evil is seen to overpower or annihilate the better principle. A fourth characteristic is thus furnished to aid us in comparing analogically possession and insanity: as once men became victims of the powers of darkness by their own acts, by rejecting the monitions of conscience, and though offering some resistance, yet yielding to the evil, and of these some also became maniacs, &c., through the indulgence of habits by which their nervous system was weakened; so we shall probably find that similar conduct still brings on similar forms of mental disease, and also that the power of Satan's temptations is influential over such persons notwithstanding that they are insane.

Notwithstanding the great length of this communication, I will beg permission to add a few brief remarks on what I should expect to be the results of such an inquiry.

1. We should frequently find in the insane a struggle going on between good and evil, as it does in the sane, though the state of the mind and the nervous condition render the resistance of the former to the evil very feeble; and we might learn how far an exhibition of Divine truth was capable of assisting the patient to regain a moral self-command, even if it did not tend to the recovery of the mental health.

2. We should also probably discover that the paroxysms of mania to which

* A doubling of the objects of vision was often alluded to by the ancients. Does this refer to the consciousness? Was this the poet's intention, when, describing the melancholic Dido, he says:

“Eumenidum veluti demens videt agmina Peuthens,
Et solem geminum, et duplices se ostendere Thebas?”

certain chronic patients are liable, are not unfrequently consequent upon some vicious habit, or the indulgence of a train of thought which draws close to the confines of sin. This knowledge, together with the fact that patients are often conscious at the time, and remember afterwards what they did during a period of excitement, though unable then to still the tempest that raged within them, may perhaps be suggestive of a moral treatment when the paroxysm has passed off. As in the case of the epileptic, whose cure was only to be obtained by prayer and fasting, may not the patient be led, when free from excitement, to seek strength to resist those causes of irritation to the mind or nervous system which upturn every remnant of mental and moral control?

3. Such an investigation may also help to throw some light on the difficult subject of the responsibility of the insane, by exhibiting the twofold influences which probably are at work within them, and by combining the knowledge they possess of the nature of any particular act with the power of resisting the temptation to its commission, we may be led to some more satisfactory mode of judging of the guilt of criminal lunatics than we yet seem to possess.

4. And lastly, we may perhaps learn how, in the conduct of education, to prevent the occurrence of this dreadful malady by instilling those habits of mental and physical restraint, which will subject passion to reason, and the impulses of desire to the pure dictates of an enlightened conscience.

SUGGESTIONS IN REFERENCE TO THE STUDY OF THE PHILOSOPHY OF THE HUMAN MIND.

BY THOMAS HUNT, F.R.C.S.

To the Editor of the Psychological Journal.

I ALWAYS read the papers of the "Psychological Journal" with interest; and assuredly the objects which it embraces are second to none connected with medical science. An essay "On the Uses and Influence of Mental Philosophy," by Dr. Rae, which appeared in the number for July, has attracted my careful attention; and whilst I agree with the excellent remarks of the author on the importance of the study of man in the higher departments of his nature, I must beg permission to introduce the subject of this communication with some friendly criticisms on that paper.

In the first place, I cannot agree with Dr. Rae in the opinion that "the slow progression of mental science" has been due to the general preference of mankind for the study of physical rather than of intellectual science: neither can I assent to the belief that the prejudice against psychological investigations which exists in the majority of mankind has anything to do with the matter. On the contrary, the study of mental philosophy has so many charms for a mind at all capable of applying itself to these subjects, that one cannot see how the disinclination of the majority of mankind can have diminished the ardour of the student. But, waiving this question, I am disposed to think that in gathering up arguments in favour of the cultivation of mental science, Dr. Rae has inadvertently confounded the subject of mental philosophy with *the popular study of human nature* in its moral characteristics; otherwise he would scarcely have classed "the Jesuits," "the present Napoleon," or "the Abyssinian traveller, Bruce," amongst the students of mental philosophy. Nor would he have attributed "the movement that is now going on in the Church of England" to the "kind of philosophy taught in the Universities." It is, however, extremely difficult for any writer who eschews technicalities to make himself clearly understood when discoursing on the arcana of the human mind.

My object on the present occasion is to offer a few suggestions to those who

may hereafter pursue this subject, which I trust may be useful in diminishing in some degree the obscurity in which it is involved.

First of all, it should be observed that the students of human nature are naturally and actually divided into three classes—the metaphysical, the moral, and the physical. The class of students who have attempted the elucidation of the metaphysical philosophy of the human mind have of late somewhat obscured the naturally indistinct outline which bounds the objects of their study by dignifying the science with the name of *moral* philosophy. The scope of metaphysical inquiry having no necessary connexion with morals (or the doctrines concerning virtue and vice), the study would be better described as your correspondent defines it—"mental philosophy;" or, as Dugald Stewart calls it, "the philosophy of the human mind."

I propose to show, that beyond its utility in improving the powers of the mind and sharpening the wits of the student, mental or moral philosophy, commonly called metaphysics, is a pursuit utterly useless, and incapable of any practical application either to *physics* or *morals*; and that if we would study human nature to any good purpose, we must leave these abstractions, and examine the mind not as an entity but as we find it palpably presented to our view in its *physical* and *moral* relations. Within these plain and homely limits, I am ready to grant, that (as Dr. Rae justly remarks) "the study of the human mind is one of the noblest and most important which can engage the attention of mankind." I will endeavour to define these limits by a more ample illustration of the subject; and regarding the writers on the human mind as distinctly divisible into the three classes above alluded to—the metaphysical, the popular, and the medical—I propose to make a few remarks on each.

1. The *metaphysical* writers study the human mind in the abstract. Overlooking or purposely neglecting both the moral and physical peculiarities of individuals, they confine their attention to those features of the mind which are common to the whole species. They regard man simply as a being susceptible of impressions, and the precise objects of their study are the natural order and phenomena of mental processes. They endeavour to ascertain how the mental machine works; they wish to analyse its susceptibilities, its powers, properties, or states; they ask how reason acquires its powers and performs its wonders; and they endeavour to trace back every mental phenomenon to its source. They study the mind partly by regarding its connexion with the external world, and partly by endeavouring, though, as we think, in vain, to examine the objects of their own consciousness; they thus undertake to discover the cause, origin, and history of ideas, sensations, emotions, and all purely intellectual processes. This is the end and aim of modern metaphysics. The ancient philosophers never attempted so hopeless a task as to explore the human mind. Aristotle was too much of a philosopher to undertake anything so utterly impracticable. The schoolmen, it is true, were fond of abstractions and intellectual speculations, but these all had a practical reference to the development of virtue; and their design seems rather to have been to arrange and define the objects of thought than to explore the mental faculties themselves. It was reserved to our modern philosophers not only to attempt the dissection of thought, but to essay the analysis of the elements of mind itself; and so much gravity, and pomp, and pretension has been thrown around the operations of this mental chemistry, as to fascinate and bewilder almost every accomplished mind which has lent attention to the scheme. There is scarcely a more humiliating fact in the intellectual history of man than that, for the last two centuries, many minds of the highest order should have been from one generation to another grappling with metaphysical abstractions which were to become the foundation, the measure, and the criteria of all human science, but which the result has shown to be utterly intangible and

void. During this enlightened period, every accomplished *natural* philosopher who has made pretensions to discovery, has established a reputation which can never die. Bacon and Boyle, Newton and Davy, Watt and Jenner, are names which will be familiar to distant generations. *Their* discoveries will never be ignored by improvements in physical science. Every future new invention will be built upon the foundation already laid by *them*. But a principle of mortality appears to be inherent in every theory of *mental* philosophy which has, during the same period, obtained a fleeting hold upon the human mind. Every new speculator who has appeared on this stage has, in his turn, done little more than sweep away the fragile monuments of the past, leaving in their place an edifice equally unstable and unsound. The *Ethics* of Aristotle, having survived the ordeal of two thousand years, are even now in the hands of the Professors at Oxford and Cambridge; but where are the "Vibrations" of Hartley? In what school is inculcated the "Idealism" of Berkeley? Who regards with respect the "Materialism" of Priestly? In what hidden sepulchre are entombed the "Categories" of Kant?

The great error has consisted in attempting the investigation of mind by a method analogous to the chemical analysis of matter. The method of Aristotle partook rather of the synthetic than of the analytic. He gathered his knowledge of mind from the qualities of known objects related to mind. The modern philosophers set to work with the attribute of mind itself, as though they were separable and divisible like the atoms of matter.

It is no longer a mystery, therefore, that "the reputation of no modern metaphysician has continued with undiminished lustre through the revolutions of a century." The celebrated Essay of Locke has lost its charms. The names of Berkeley and Hartley, men of great worth and high attainments, are associated with ideas now regarded as preposterous. Hume and Reid, Stewart and Brown, names once highly esteemed amongst modern philosophers, will scarcely be mentioned in the next generation.

For what earthly purpose, then, shall we attempt to cultivate a (so called) science, which, after engaging the attention of highly accomplished minds for several generations, has not left us one single principle, one undisputed inch of ground on which we can set our foot? If it be alleged that metaphysical philosophy is the *gymnasium* of the youthful mind—that all things seem easy and simple to the man who has long contended with these remote abstractions, and that without such exercises the mind cannot attain to its normal development—my reply is, the giants of antiquity needed no such helps. Aristotle, Theophrastus, Hippocrates, Galen—all achieved their respective successes without entering the arena of modern philosophy. Let it be fully granted that these exercises do give strength and agility to the mind, that they enable it to discriminate more readily, to distinguish shades of difference between ideas and propositions which the vulgar would confound,—still, I maintain that all these advantages would be better secured, as well as more readily acquired, by the study of logic and mathematics. Young men who have neglected these first principles of reasoning and become bewildered on the enchanted ground of metaphysical abstraction have rarely distinguished themselves in after life. The mind is liable to become paralysed by attempting what is evidently beyond its strength, and the more homely studies which fit men for the duties and business of life become distasteful to the towering spirit, just as the panorama of Primrose Hill offers no attractions, the Peak of Snowden no wonders, to the practised aeronaut. A man who only *thinks* he can fly despises pedestrianism even while he walks.

2. The *moral* or *popular* writers on human nature have no sympathy with the metaphysicians. They see the mind of man through a different medium, and study it with other views. If our modern philosophers, who look at man

only in the abstract, have scarcely shed a ray of light on the phenomena of mind, still less have they expounded the moral and social qualities of human nature. But it is here that the moralist takes his stand. He studies and portrays mankind just as he individually is, not in his essence or abstractions, but in his social relations and moral attributes. That this mode of investigating human nature (correctly speaking, the true *moral* philosophy) has been abundantly successful, is obvious to all. Our divines, historians, poets, novelists, and dramatic writers well understood their task; and they have earned a fame as imperishable as that of Bacon and Newton. The names of Addison, Johnson, and Shakspeare, will be known when modern metaphysics and its professors are forgotten. It is to this popular study of human nature that we are indebted, and not to mental philosophy, for the influence exercised by the writers alluded to by Dr. Rae, who has evidently confounded these two departments of study, as unlike each other as commerce and classical literature.

3. But the *physical* study of man, in his mental development, the department of the physician, is that which most concerns the psychologist: and this brings me to the question, the importance of which first induced me to take up my pen:—Is it advisable, or desirable, that a student of medicine, intending to practise his profession, should give his mind to the study of metaphysics?

It is essential, certainly, that the physical relations of the mind should be most carefully studied. The healthful condition of both body and mind, especially in their mutual relationship to each other, must be observed and understood, before their morbid conditions can be apprehended. And in disease, whether of body or mind, who can exaggerate the importance of rightly estimating the reciprocal influence of both on each other? If it be the special business of the psychologist to ascertain and diagnose the physical causes of insanity, it is not less the duty of the physician, ay, and of the surgeon too, to mark well the influence of affections of the mind in producing disease of the body. Much has been written on the effects of mental hysteria in inducing simulations of disease; but the influence of mental emotion on the corporeal frame of both sexes is a subject which, though forming the staple commodity of novel writers, has perhaps scarcely attracted sufficiently the study of the profession. An accomplished girl of extraordinary personal attractions, and the heiress of a pretty fortune, fell in love with a lame cobbler of diminutive stature and repulsive physiognomy. Such things will happen. Her attachment was warmly returned; but the course of true love never did run smooth, and an impediment existed, besides the natural opposition of the parents to so preposterous a match. She was, and had been for some time (under the care of a celebrated oculist) suffering from severe pain in the orbit and globe of each eye, whenever she opened her eyes or attempted to use them. The disease was diagnosed “an hysterical intolerance (not of light but) of vision.” The lameness of the cobbler was attributed to some strumous affection of the hip joint, and he had been treated accordingly, but with no benefit. One fine morning the couple contrived to accomplish a clandestine marriage. They entered the church respectively blind and maimed: he with his usual halt, walking with a crutch, she with a green shade over her brow, her eyes closed, and led by her lover to the chancel steps. The ceremony over, the cobbler recovered the use of his leg and threw away his crutch; the lady found her vision quite as marvellously restored, and from the time she made her egress from the church, suffered no pain or inconvenience in reading the smallest print. These I know to be facts, and, after the most rigid inquiry, I am satisfied there was no sham or imposture in either case. The diagnosis of the cobbler’s lameness might have been erroneous, though it was made by a highly respectable surgeon. This case, and a hundred others which might be

quoted, serve to show that when we cannot readily account for disease, it will be as well to inquire into the state of the mind. And this leads me further to insist that,

The *moral* study of human nature is highly desirable for the student of medicine; and in order to pursue this to an available extent, he must study mankind as Shakspeare did—not metaphysically, overlooking the individual, nor by observing the conduct of an individual or a sect or a province, *only*; but by observing human nature in all its relations and phases, and, so far as is possible, at all times and seasons. Men and women, except on special occasions, are very apt to conceal their emotions, motives, and springs of action; but dramatic incidents and occasions, and the not less romantic events of real life and historic record, bring them out, and show how closely interwoven are the infirmities of mind and body. And so universally is mankind subject to moral aberration, folly, and vice, so weak in resolve, and when resolved, so indeterminate in action; so easily led into errors which he *sees* are wrong, so readily tempted to conduct which he knows he shall repent—or else reckless of consequences, unscrupulous and wicked—that every sensible writer on human nature, of whatever nation, or class, or date, has invariably portrayed mankind as *morally deranged*. Some have even excused his excesses on this very ground; but the common sense of mankind, as expressed in the criminal code of every civilized nation, has pronounced differently, and made man responsible for his crimes. For many generations the commission of crime was regarded as a sufficient ground of punishment. The physical condition of the brain, as concerned in perverting the moral sense, was seldom or never taken into the account. The subject has excited the most diligent attention of late years, and medical men are now in danger, not of overlooking the state of the brain in criminal lunatics, but of underrating the moral derangement which may exist, even in its most atrocious forms, when the brain is perfectly sound, and the individual consequently responsible. Now, the remedy for this liability to error is the diligent study of human nature in its *moral* aspects. The historical portions of the Bible, and the works of Shakspeare, contain the best illustrations of this subject. Scott delighted to mingle the immoral and the insane affections so hazily together for the purpose of effect, that many of his most prominent characters throw little light on the question; but his subordinates for the most part make excellent studies.

I cannot conclude these remarks without pointing out a great deficiency in the *medical mind* of this country, arising from some error in education. I allude to the strange want of *logic* in the medical authors of the day. Every medical reviewer is constantly pointing out how this, that, and the other author is “reasoning in a circle,” “begging the question,” “reasoning on opinions as though they were facts,” “assuming as facts things only probable,” or “representing as facts, and reasoning on them, events which have never occurred,” and there are ten chances to one that, before the reviewer has finished his criticism, he falls into the same error himself. Now, all this is due, if in part to prejudice, yet chiefly to the want of mental discipline, and instruction and practice in the rules of logic in early life. As men *begin* to think when the mind is expanding into maturity, so they continue to think till their lives’ end. If they get into early habits of vicious ratiocination, these are almost sure to become inveterate and incurable; some of the highest ornaments of the profession, so far as diligence, tact, and perseverance have brought them into note, are at this moment rendering themselves ridiculous and contemptible by their notoriously *false reasoning* about opinions, persons, and things. It is but charitable to suppose that the same defect (easily rectified in early life) may have plunged some hopeful aspirants into the slough of homœopathy.

It is certain, at all events, that a man who *cannot* reason well (for I am not-

alluding to dishonest reasoners), must find a limit to his fame and influence as he advances towards the higher degrees of professional reputation. Nothing can compensate for this radical defect. A want of classical knowledge may cripple his reading and limit his influence with the higher classes of society; but this will not clip his wings. A good surgeon is scarcely the better surgeon for classical lore, though he may the more adorn his profession: but no physician, nor even surgeon, can clearly understand his profession without a knowledge of the art of reasoning. *Mathematics*, though absolutely necessary for understanding the mechanism of the human frame, will not supply the want; for, although the mind requires the discipline of mathematical study to render it capable of understanding logic, yet, it must be remembered, medicine is not an exact science. It deals, and must deal, with probabilities as well as facts. Medical doctrines must for the most part be received, as Bishop Butler has shown the Christian doctrine must be embraced, not by absolute demonstration, but by a balance of probabilities. In the case of Christianity, the balance is, to every candid mind, overwhelming; but in medical matters the preponderance is very small, often where life and death are suspended in the scale. And, though our lenient laws make due allowance for a man who, with the best intentions, errs, yet it is easy to see how the life of a patient may be sacrificed to the misapprehension of a mind duly informed, but not duly skilled in balancing the weight of evidence.

ON THE MIND.

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THE three great foundations of human knowledge are, nature, mind, and God. The mind, next to God, is the most important subject for the contemplation of man; and a right appreciation of its powers, nature, and destiny, is essential to his welfare and happiness, and to his elevation to a higher state of intellectual and moral existence. The human mind has been a fruitful source of daring speculation, impious assertion, and ignorant research among mankind in every age of the world. The object of this paper is, not to give a review of the various opinions which have been held by philosophers regarding the nature, the powers, and susceptibilities of the mind, nor even to enumerate its powers and functions, but to show that the mind does exist as an immaterial spiritual essence. That which thinks, feels, and reasons, we term mind: that which has extension, weight, colour, &c., we term matter. Mind and its phenomena form the internal world of thought and feeling: matter, in its varied forms and combinations, forms the external and visible world. Some philosophers have denied the existence of mind; others have disbelieved in the existence of matter; while some, again, have confounded together matter and mind as one and the same substance. Before examining the sceptical and other opinions relative to mind, we shall notice a few of the opinions that have prevailed among philosophers respecting the seat of the thinking principle in man. Aristotle located the mind, or soul, in the left ventricle of the heart. This opinion has come down even to the present time, as is evidenced by the popular phrases—a hard, or tender heart, &c. Other ancient philosophers maintained that the soul was not fixed in any particular part of the organism, but was diffused throughout the body. This opinion was revived by Whytt, a celebrated modern physiologist. The movements observed by him in the limbs of recently decapitated animals, seemed to favour the idea of the soul not being located exclusively in the brain. The function of the spinal cord was not

known in Whytt's time, hence the mistake which he and others fell into with regard to the seat of the mind. There have not been wanting philosophers, who in their anxiety to find a fitting habitation for the mind, have plunged it into the stomach: and if one may judge by the very delicate, and almost exclusive attention which this organ receives from many in our own day, some vestiges of this opinion would appear to linger still in the popular mind. When we attend to our mind's thinking, we have an obscure feeling that our thoughts take place in the brain; accordingly, some ancient, and most modern philosophers, have considered this viscus to be the seat of the mind. Plato recognised three faculties of the mind; the first he placed in the liver; the second, or irrational soul, he located in the heart; and the third, or rational soul, he placed in the brain. Similar notions to these of Plato's were entertained by Galen. Some philosophical writers have restricted the seat of the mind to particular parts of the brain: thus, Descartes located the soul in the pineal gland; others in parts surrounding that gland, or in the larger cavities of the brain. Again, some philosophers have considered the mind as diffused through the brain, while others have placed the different faculties of the mind in separate portions of that organ. The Arabians, who, previous to the revival of letters in Europe, had made great progress in various branches of learning, distributed the mental functions among the ventricles of the brain. The two anterior ventricles they made the seats of sensation and imagination; the third ventricle was the seat of the understanding, and the fourth, of memory. Similar views of the location of the mental faculties were held by the celebrated Duns Scotus and Thomas Aquinas, and by some modern physiologists, as Viëussens Meyers. The most distinguished physiologists of the present day consider the cerebrum to be the seat of the intellectual powers, and the base of the brain that of the volitions and emotions. It is not yet determined what part of the brain is the seat of the mind, nor even how much of that organ is necessary to thought; in fact, notwithstanding all the efforts of ancient, modern, and living physiologists, we are yet ignorant of the function of various parts of the brain, and it may be safely affirmed, that it will require the "researches of the acutest intellects for ages to come to determine the function of the various parts of the soft, pulpy mass forming the human brain;" and therefore, it seems an unphilosophical and preposterous attempt of phrenologists to determine mental powers by an external examination of the head, when the function and uses of the parts contained within it have not been ascertained. Although the part of the encephalon, which is the seat of the mind, has not been determined, there is no doubt that it is the organ of the mind. This is evident from the fact, that without a brain no phenomena, strictly mental, are ever exhibited. It is also evident from the connexion observed between mental operations and the development of this viscus. In infancy, when the brain is very soft, and only partially developed, there is hardly any manifestation of mental phenomena. In youth, the brain attains a higher development, and brings with it a corresponding increase of mental power. In the prime of life, when the brain has reached its full maturity of growth and vigour, we recognise the mind exercising its most marvellous characteristics. From this to old age, there is, in general, a gradual declension of mental vigour, until the person "falls into the sear and yellow leaf,"—when that vigour of thought, that ready utterance, which formerly characterized him, are no more. The "voluptuous swell" of music, the impassioned eloquence and glowing imagery that charmed, now fall unheeded on his ear; the breathing statue and the fair forms of nature have now no beauty for his weakened eye. The present makes no impression on his mind,—he lives upon the past, his thoughts are of his earlier years,—on "words that run molten still in memory's mould, and will not cool." "He sinks to second childishness, sans teeth, sans eyes, sans taste, sans everything," when death steps in and closes the scene.

That the brain is the organ of mind, is further evident from the mental manifestations, varying, not only according to age, but also according to the varying condition of the brain throughout the whole period of individual existence. The disturbance of thought and feeling, the dislocations of memory, &c., in the various affections of the brain, as in fevers, inflammation, injuries, &c., all prove that the brain is the organ of the mind; that it is the seat of consciousness, the centre of sensation, the instrument by which the mind holds converse with the external world; that it is the material tenement of the mind, "the dome of thought, the palace of the soul."

We have thus represented the brain as the organ of the mind; but the sceptic denies that the thinking principle, termed mind, exists. He says it cannot be seen nor distinguished by any of the other senses, and therefore, according to his superior wisdom, it cannot exist. The sceptic must and does believe in the existence of many things which cannot be recognised by the senses, as the principle of life in plants and animals for instance. Yet he says, Show me the mind, make it visible to my sight, give me the same evidence of its existence as what is afforded of the existence of material objects, and I shall then believe it as a reality. Now, what evidence has he of the existence of matter? He talks about touching and seeing matter, but how does he know that that which he touches or sees really exists? He says, because he is conscious that he touches or sees it, and therefore is convinced of its existence. Consciousness then determines the existence of matter, without which his senses would be of no use whatever in learning either the existence of matter or one single property of it. He thinks, feels, reasons, or rather argues; he cannot touch or see these, but he is conscious of their operation within himself. If then he infers the existence of matter because he is conscious of touching or seeing it, he must also believe in the existence of mind, because he is conscious of its operation within himself. Nay, he should be even more convinced of the existence of mind than matter, because the evidence of its existence, viz., processes of thought, volitions, feelings, &c., makes a direct and instantaneous appeal to his consciousness; whereas the proofs of the existence of matter appeal to his consciousness indirectly, through his senses, which may deceive him. In the case of mind, there is no possibility of deception; because the proofs of its existence pass through no channel or mediums, but directly and at once to his consciousness. The sceptic, however, may say, that although he is conscious of thinking, feeling, and willing, that this does not necessarily imply the existence of a permanent substance termed mind. We answer, that extension, weight, form, colour, which are revealed to his consciousness by his senses, do not prove the existence of an abiding substance termed matter. If he disregards the facts of consciousness relative to mind, to be consistent, he must also disregard the facts of consciousness respecting matter, and consequently have to deny the existence both of matter and mind.

The sceptic is noisy in argument and clamorous for demonstration, forgetting all the time that there is a consciousness within man which convinces him of the existence of mind with a force and with a power such as argument never gave nor demonstration effected. Materialists admit that the brain is the organ of the mind, but, in general, deny that the mind is an essence distinct from the brain. They say that mind is merely the result of a peculiar organization of the brain; that all mental manifestations are only the result or product of material changes in that organ; that religion, thought, joy, &c., are all material, not spiritual, and that at death the mind ceases to exist. This is the common doctrine of the materialist. We would ask, how mere material changes in the brain could alone produce thought, or the glowing forms of fancy and the sublime creations of the imagination? What mere vibrations of, or changes in, organic fibres could alone produce a mother's love, a Christian's faith, a patriot's heroism; or give rise to the brilliant coruscations of genius, the fiery

zeal of the enthusiast, or the divine composure of the martyr at the stake, or form the "hope that springs eternal in the human breast?" What peculiar combination of material particles alone could form the power which enables man to grasp the past and the present, to unravel the secrets of nature, to range from world to world and from system to system, to measure the distances of the stars, and calculate the comet's distant flight; that power which enables him to rise from the contemplation of the wonders of the world below, and of the mighty orbs which glitter in the firmament above, to the contemplation of Him who is eternal? What particular arrangement of organic particles alone could produce that universal belief among mankind of the existence of a supreme being—a belief common to every age of the world—common to the learned and unlearned, to the man whose mind has been expanded by science and philosophy, and to the "rude untutored Indian, who sees God in clouds and hears him in the wind?" What combination of mere material particles alone could produce the notion of self-existence, of personality; or that untiring and constantly abiding principle, the will which reigns in every man, regulates the other faculties of the mind, and enables him to rise superior to the force of circumstances?

But let us encounter the materialist on his own ground. He says the mind is nothing distinct from the brain, that intellection is mere cerebration, that thought and all mental states are the result or product of material changes in the brain, as movements of its fibres, or changes in its particles. Now, it may be asked, what puts these fibres of the brain in motion? what produces this supposed state or condition of its substance, which results in thought, in the exercise of the imagination, and other states of mind? These supposed movements could not take place without the action of a force or power equal to the effect. No change of state of material particles can occur without the operation of a force or power. This is a universal fact in nature. When we look abroad upon nature, we observe a variety of forces in continual operation. We cannot analyse them, or explain their nature. The laws which regulate them—their phenomena, are all that we know concerning them. But we can only conceive of them as essences or energies—types as it were of our own mental energy when producing bodily movements.

Thus, when two material bodies are brought within a certain distance of each other, the one attracts the other. This movement is said to take place by the law of gravitation; but gravitation is not a mere abstraction. It must be a force, otherwise it could not move a particle, nor whirl a world through space. When a magnet is suspended above a needle, this is drawn towards it. The movement in the needle is determined by the magnetic force existing in the magnet. Two chemical compounds being brought into contact with each other—two new compounds are formed. The change of state, or movement in the particles of each body, is the result of the action of the chemical force or affinity. If a seed be planted in the earth, a change in its particles soon follows. This is owing to the vital force inherent in the seed. We see, then, that no change of state or condition, or movement of the particles of a body, can occur without the operation of a force or power. Therefore, we must conclude that the movements, or changes of state or condition of the molecules of the brain, which are alleged by materialists to be the sole cause of mental states, cannot occur without the operation of a force or power; and that must be the mental force or energy. There must be, even according to the materialist's own theory of mind, something in the brain, distinct and different from itself, to produce thought; and that something must be a constantly abiding and ever-acting energy; and nothing but an immaterial spiritual essence can explain mental phenomena, especially the action of the will and the notion of self.

The powers of thought are wearied by close and continued exertion, and re-

quire rest for further and difficult efforts ; and fancy has oft to rest on her airy pinions before she can take another or a wider sweep through her rich and varied domains ; and the imagination, even in the most gifted genius, cannot always rise to a lofty conception ; the deepest sorrow and the most tearless grief may subside from the memory, and the strongest passions ebb and flow ; and because these and other powers and susceptibilities of the mind are wearied by exertion, weakened by time, and cannot always be aroused into a state of activity, shallow pretenders to philosophy think that this, which is merely an evidence of the imperfection of the bodily instrument of the mind,—that this is a proof of the material and perishable nature of the soul.

But the will is not open to this senseless objection of the materialists. No ; though the powers of thought and reason may fag and fail, and fancy and imagination be often cradled in repose,—though passions and emotions may pass from the memory as a dream, yet the untiring, the ever-acting, the constantly-abiding, the indomitable will remains an unanswerable proof of the soul's divine origin,—a proof that it is something distinct from the brain—spiritual, immaterial, destined to immortality. Again :—physiology teaches us that our bodily structure is constantly undergoing a change, that its old particles are continually being removed, and that new ones supplied from the blood come to occupy their place. The brain is subject to this general law, so that a certain time it will be made up of entirely different particles from what composed it at a particular previous period of life. Although the encephalon is constantly undergoing a change, and, in the course of a long life, must necessarily be frequently wholly renewed in its molecular or nervous structure, yet amid all these changes of the brain, the individual still retains the consciousness that he is himself the same being whose infant steps were tended by a mother's care, and who now, after the vicissitudes of a long life, totters on the verge of the grave. Though he has been raised from pining poverty to boundless wealth, from mean obscurity to princely rank ; though his star has risen in the palace of a king and set in a pauper's bed, or in a felon's grave ; and though he has entertained, by turns, the most opposite opinions in politics, philosophy, and religion, yet through all these changes in his mental and external condition he still retains the consciousness of his personality. This could not be the case were the emotions, hopes, joys, thoughts, and actions which make up the sum of human life, merely the result or product of material changes in the brain ; because if this were so, then all consciousness, all remembrance of these would cease when the particles, which are their supposed representatives, have been removed from the brain by the action of the organic law just alluded to ; unless we have recourse to the absurd supposition, as mentioned by Dr. Abercrombie, that each particle, on its removal from the brain, impressed its successor with all the thoughts, ideas, &c., with which it stood itself connected. Were the emotions and other mental states nothing more than the mere result or product of cerebral conditions, the past of our lives would be a blank ; the impressions and hopes of our earlier years be forgotten ; life a dream, and old age a miserable, joyless existence. But the individual, from youth to age—through all the vicissitudes of a long and weary life—retains the consciousness of his personality, and remembers the joys of childhood, the dreams of youth, the struggles and hopes of his riper years, even more vividly than he does the anxieties of his old age, or the impressions of yesterday,—a proof that the mind is something different from the brain—something more permanent than time, and lasting as eternity. Another proof of the spirituality of the mind—and of its being something distinct and different from the brain, and depending on organization merely for its manifestation, and not, like the vital principle, for its existence—is that the mental powers do not, as materialists assert, decline invariably *pari passu* with the vital

principle. The mind may expand and increase in vigour long after the declension of the vital principle, and may remain apparently unimpaired throughout a long life, up to the very moment of dissolution, as in the case of Franklin, Watt, Wellington, and many others. The last ten years of Franklin's long life were amongst the most important of his useful existence. Wellington was a good example of the vigour of the mind continuing with the ruins of its bodily frame. His physical vigour gradually declined until he became weak and feeble as a child; but his mind remained powerful and serene to the last. His great spirit only fled when the feeble spark which bound it to humanity was quenched in night.

The opinion, therefore, openly expressed by the French infidels of last century, and still maintained by many materialists of the present day, that the mind is nothing distinct from the brain; that all mental states are only the result of material changes in that organ—this opinion, which degrades man to a mere thinking machine, and makes him the very weather-cock of circumstances—this opinion is not only opposed to revelation, but to common sense and the laws of nature. They who have entertained this degraded opinion of the mind, have entirely overlooked the necessity of having an energy or force to set the fibres, particles, or molecules of the brain in motion, or to produce the material changes in that organ which they have supposed to be the mental states themselves. Whatever share cerebral states may have in the production of mental phenomena, it is quite evident to any one who calmly reflects upon his own mental condition, that there must be, beyond and above all cerebral states or changes, an ever-acting and abiding principle within him—an essence or energy to produce the ever-varying phases of human consciousness. The term materialism, however, must be understood with great limitations, as it has been too often applied indiscriminately to the philosophical systems of all writers, who have not fully recognised the spiritualist's theory of mind. The refined and philosophical materialism of Priestly, for instance, who did not admit the mind to be an essence distinct from the brain, although he recognised both the immortality of man and the existence of a supreme Being, has been classed with the gross materialism of the philosophers just alluded to, who not only ignored the immortality of man, but denied the existence of a Deity. Priestly's views on the nature of the soul have been greatly misrepresented, and he had to endure much undeserved and cruel persecution from the narrow-minded and fanatic of his own day and country, on account of his philosophical opinions. Even Hartley has been ranked among materialists, because he merely tried to account for the manifestations of mind by his theory of "Vibrations," although he was careful to show that the mind, the thinking principle itself, was a spiritual, immaterial essence. The more philosophical materialists of the present day recognise the mind as an essence either distinct from the brain, but material and imperishable in its nature; or, like Priestly, admit the immortality of the mind, but do not consider it to be an essence distinct from the brain. The opinion of the soul being material does not necessarily imply, as it has been foolishly supposed, a disbelief in its immortality, nor in the being of a God. Nay, some distinguished writers of the present day consider, that such a belief respecting the nature of the soul does not necessarily lead to immortality—an opinion, however, to which we cannot fully subscribe. It requires considerable powers of mind to grasp the idea of the mind being a material spirituality as it were; and the opinion is much more likely, in most minds at least, to lead to pantheism, or to an elevation of nature above God, than to an elevated idea of him. Hence the danger of its operation upon the mind and conduct of man. We have used the term material spirituality, with reference to the essence of mind, because we can only conceive of forces or powers, essentially material, as being also spiritual, as the vital and magnetic forces, for instance. The materialistic doctrine under consideration recognises the im-

mortality of the mind, as well as the existence of a Deity. It supposes the mind to be an essence similar to the essences or forces which produce the phenomena in nature. To say that the mind is a material, and not an immaterial essence, is merely arguing about a term. We do not know, nor will we ever know, in this state of existence, the nature of the essence of either matter or mind. We cannot tell in what they differ, nor in what they agree. They are too subtle for our limited capacities to analyse. They lie beyond the grasp of the human intellect. We know only their phenomena—the results of the operation of these essences; and judging by the results of the operation of the principles, or essences, which we term matter and mind, it is unphilosophical and contrary to common sense to suppose that essences, producing results or phenomena so different and dissimilar to those of each other, can be of one and the same nature. To admit this, is to admit what is absurd and contradictory, viz., that like causes produce different and opposite effects.

What but an insane or strangely distorted mind can believe that a thought or an emotion is produced by an essence of the same nature as what forms a stone or a clod of the valley; or believe that the essence is the same, in kind, that produces the efforts of reason, the bright forms of fancy, and the visions of the imagination, as that which forms the gems of earth and of ocean, and the varied objects of the vegetable world; or believe that the essence is the same which links man to man in the bonds of brotherhood and love, as that which binds together the particles that compose the eternal hills; or believe that the essence which vibrates through humanity, through the whole family of mankind, and centres in the great Spirit of the universe, thus forming one grand, vast, and glorious spiritual community, is the same in its nature as that which maintains the ocean on its bed, the planets in their spheres, and causes them to revolve in ceaseless harmony. Further:—matter, in all its forms, can be recognised by the senses. It has extension, weight, colour. It is divisible. But is a thought divisible? Can you weigh the conceptions of the imagination, or see the goddess Reason seated on her throne? Are passions and emotions made known to us by hardness, or softness, or by any other properties by which material objects manifest themselves to our senses? Matter, then, is made known to our consciousness through the senses—mind is recognised by consciousness alone. Is it not reasonable, therefore, to conclude, that essences producing results or phenomena so very different and dissimilar to those of each other, and which are revealed to us through different channels, are themselves dissimilar in their nature? Are we not justified in believing, that wonderful as are those hidden principles in nature—those essences or forces which are in continual operation in the earth, air, and ocean, forming and supporting the wonders of the outward and material creation, that they are different in kind and nature from that spiritual essence—the divine *particula auræ* which forms the internal world of thought and feeling in man. The immortality of the soul is denied by infidels and the majority of materialists, not by all of the latter, as we have just seen; for materialism is not necessarily associated either with infidelity or disbelief in the immortality of the soul. Strange that men, who have been professed worshippers of nature, should ever have conceived that the principle of thought within them would sink into nothing, or that the stability of nature did not lead them to form more rational views regarding the destiny of the soul. Nature still labours with undiminished power and vigour and skill in her innumerable and diversified workshops, from which she sends forth forms as perfect and as exquisitely beautiful as those which she first launched forth into the watery world, or sent teeming from the surface of the earth. Thousands of years have not been sufficient to diminish, far less exhaust, her creative powers; yet, threescore years and ten, or the appointed time of man's pilgrimage on earth, nay, even a few moments of time, have been thought sufficient to annihilate what is

superior to and above all nature, the creative energy in man. But apart from revelation, it is contrary to the spirit of true philosophy and to the common feeling of humanity to suppose, with the sceptical materialist, that the soul at the death of its material tenement ceases to exist. The death of the body is merely another name for change of state or condition. None of its elements are lost. This can be proved by chemistry to be the case. Is it, then, philosophical to suppose when the material and grosser part of our nature merely undergoes a change at death, that the immaterial, the finer part, the thinking principle within us, shall cease to be? Decay in the animal and vegetable worlds is only a state of change, not an annihilation. The same holds good with respect to mere dead matter. Its disappearance from view is no evidence of its annihilation. It is merely a change in the condition or arrangement of its constituents. The rocks and cliffs that guard our coasts, by the incessant action of the air and the constant play of the surge upon them, may, in the course of ages, undergo some change in their rugged aspects; but the particles which crumble from their surface, and are washed away by the billows, are not lost. They are deposited in other, and it may be, distant parts, entering, perhaps, into the formation of other rocks, which may form the bulwarks of future islands, on which civilizations higher than our own may flourish, and which may be destined to form the strongholds of liberty in future and distant ages of the world. When the death of the body and the decay of animal and vegetable forms are merely indicative of a state of change, and the disappearance of inanimate matter is only a resolution into other compounds; when no material particles cease to exist, how absurd to suppose that that which is spiritual and immaterial shall cease to be. Judging then by the continued existence of matter, is it not right to infer the continued existence of mind? Does reason, independent of revelation and the aspirations of man, not justify the belief that the immaterial principle within us shall survive the dissolution of our bodies, "the wreck of matter and the crush of worlds?" Nay, when we see mere inanimate matter becoming possessed of new powers, or assuming more lovely forms by a change in the arrangement of its component parts, or disappearing from view merely to come forth again more ravishingly beautiful; when we see the black, opaque, and almost valueless carbon, by a change in its particles, becoming the brilliant and transparent diamond which "glitters with the play of a thousand colours upon the hand of beauty;"—when we see these changes in mere dead matter, would it not be more reasonable to conclude that the soul at the death of its corporeal tenement, instead of sinking into nought, or even remaining as it was before, shall be endowed with purer and loftier aspirations, with more exquisite powers and susceptibilities to enable it to get a deeper insight into the majesty, the beneficence, and wisdom of Him who is eternal? But the proof of the indestructibility of the mind does not rest alone upon the analogy afforded by the permanency of matter, nor upon the evidence furnished by the continual existence of its material tenement, but upon those longings after immortality which are native to and inherent in the mind—those aspirations common to humanity, those feelings and emotions implanted in man, which convince him with a power, stronger than argument, that the principle of thought within him is immortal—"That the grave is not its goal. Dust thou art, to dust returnest, was not spoken of the soul."

We have seen that the opinion held by one class of materialists, that the mind is nothing distinct or different from the brain, that it is only the result of a peculiar organization of that organ, is not only opposed to revelation, but to common sense and the laws of nature.

There is, however, nothing degrading to human nature, as many theologians and spiritualist philosophers would seem to believe, in the supposition that the brain undergoes some change in the condition of the substance during mental operations. This we believe to be the case, and to be necessary to their occur-

rence ; and that the brain may be worn out, not merely indirectly, but directly, by excessive thought and emotion, just as any other organ of the body may be exhausted by continued physical excitement. In every act of mind, from the highest intellectual effort to the most dreamy and tranquil exercise of the imaginative powers,—from the strongest burst of passion to the gentlest impulse that stir the soul, there are certain changes effected in the nerve-matter of the brain. This we may reasonably infer from the mysterious union which subsists between the spiritual and corporeal elements in man, without being liable either to the charge of materialism, or of detracting from the powers and qualities naturally belonging to an immaterial spiritual essence. In all probability, the changes which take place in the brain concurrently with the mental operations will never be ascertained. The light of science may never penetrate this obscure psychico-physiological region.

But the thoughts, emotions, and other mental states are not, as materialists suppose, the result or product of concurrent cerebral conditions. These material changes, whatever they may be in their nature, are not the thoughts and emotions themselves, neither are they the cause of them ; the cause is mind, the spiritual or mental force. We know nothing, nor will we ever know anything, in this state of being, of the mind thinking separated from, and independent of, the brain. The union of the mind with the brain is necessary to mental manifestations, as heat and moisture are to the development of the vital force in a seed, or as the sun is to the present diffusion of light to the earth. Heat and moisture are conditions necessary to the springing up of a seed, but they are not the cause of it. The cause is the vital force inherent in the seed. Without the vital force, heat and moisture would be of no avail in the evolution of a seed into a plant. The brain is also the condition necessary to mental manifestations, but it is not the cause of them. Materialists continually confound the condition with the cause of mental phenomena. They recognise the organ, but not the essence of thought ; the material, but not the spiritual element in the phenomena of mind. The brain is the organ as well as the instrument of the mind. The spiritual principle in man works, not merely through, but by means of the cerebrum. One great cause, we believe, of the slow progress of mental philosophy, and of its limited success in promoting either the intellectual or moral improvement of man, as well as of its comparative inefficiency in advancing the treatment of mental and other diseases, is, that it has, in general, been based upon the idea of the mind being an entirely independent spiritual essence—the connexion of the mind with the brain having been either wholly overlooked, or the encephalon having been viewed merely as the material tenement of the mind—the instrument by which the spiritual principle holds converse with the external world, and nothing more. And the failure of the systems of mental philosophy, grounded on cerebral physiology, has been owing to their having ignored the existence of the immaterial and spiritual principle altogether. This has been the case too often even with phrenology. Undoubtedly phrenology has been the means of promoting sounder views on physical and moral education, and of extending our knowledge of the physiology of the brain, as well as of establishing clearer views of its diseases and their treatment, whilst it may be admitted that the fundamental principles of phrenology are, in the main, correct—viz., that the brain is the organ of the mind, that it is a double organ, and that certain parts of it subserve particular functions of the mind. Yet, as a science, it is completely defective : its basis is sound, but the superstructure is thoroughly deficient. The details, in fact, are neither metaphysically nor physiologically correct. The mental analysis, corresponding to the phrenological system is utterly at variance with the facts revealed to any one who reflects upon his own inward consciousness. And bumpology is not only not established by physiological research, by pathology and comparative anatomy, but they actually dis-

prove it. Before the advocates of phrenology can expect to see it established as a science, and elevated, as they desire, to a branch of metaphysics, two things are absolutely essential—viz., first, a comprehensive and complete analysis of mind; and secondly, a division of the encephalon corresponding to that analysis, and determined, not by an external examination of the head, but by physiological and pathological researches on the brain.

Mental and moral philosophy, as well as mental pathology, to be of real practical value to mankind, must be inductive, not speculative; they must be based, not on either the mind or brain exclusively, but on both; they must have a psychico-physiological foundation. The great aim of the metaphysician should be to investigate the mind in the way pointed out long ago by Lord Bacon—viz., in its relations to the brain. He should endeavour to discover the relations of mind and matter; the dependence of psychical on physical states; the correlation of mental and nerve force; the mutual actions and reactions of the spiritual and somatic elements in man, and all the varying phases of human consciousness in their outward manifestations. The metaphysician, in short, should not only closely and perseveringly scrutinize the facts of consciousness on the one hand, but he should also carefully investigate the facts of physiology on the other. In no other way, we believe, can mental philosophy be advanced and rendered subservient to the progress of man, and made available to the physician in the treatment of insanity and other diseases. It would also be the means of effectually putting down, or at all events of checking, the freethinking and materialism which so largely prevails at the present time, and which will always prevail so long as the corporeal and spiritual elements in man are not mutually recognised by philosophers in the production of mental phenomena.

The difficulties in the way of the establishment of a system of mental philosophy on a psychico-physiological foundation, are, as it has been truly observed in an editorial article in the *Psychological Journal* for July, very conceivable; but however great the difficulties may be, they must be approached and overcome before we can hope to see mental philosophy become of that great utility to man, to the psychologist, and the physician which it ought to be. And we venture to remark, that had the mind been studied in the manner mentioned by Bacon, and had even one-half of the genius, ability, and research been directed to that mode of mental investigation which has been wasted in metaphysical battles between the nominalists and realists, in useless speculations respecting the essence of mind and matter, and in the establishment of philosophical systems on exclusive and mistaken foundations, mental philosophy would not have been in the anomalous position which it now is, but would either have been wrought into a system commanding general acquiescence, or else, its fundamental principles would have been so correctly established as to render the completion of the details a matter of easy accomplishment to future philosophers.

WILLIAM TUKE, THE FOUNDER OF THE YORK RETREAT.*

WILLIAM TUKE was born at York in the year 1732. His ancestors had resided for many generations in that city, and were descended, in all probability, from a family long settled in the south of Yorkshire, and the adjacent county of Nottingham.

The York branch early suffered for Nonconformity; the great-grandfather and namesake of the subject of the present sketch having advocated the doctrines of the Society of Friends soon after its rise, and submitted to imprisonment, and the loss of property, on account of his religious opinions.

* The particulars of this sketch have been furnished us by Dr. D. H. Tuke, of York, the great-grandson of the founder of the Retreat.—ED. P. J.

When a boy, William had well nigh lost his life by a fall from a tree, which he had climbed in search of a bird's nest. An eminent surgeon was sent for, however, who found the skull fractured, and performed the operation of trephining. Though thus apparently fond of bird-nesting, he was not an idle school-boy, and, in addition to the acquirement of rudimentary knowledge, made considerable progress in the Latin language, retaining in advanced age a lively recollection of some passages of Virgil's "Georgics." After being at a day-school, he enjoyed the advantages of a boarding-school, and was for some time placed by his father under the tutorship of a clergyman.

He married at the age of twenty, and had by his first wife five children, the eldest of whom, Henry, co-operated with him in his exertions relative to the Retreat.

In 1765, he took a second wife, by whom he had three children. For the last twenty-eight years of his life he was a widower.

During the greater part of his life, William Tuke was engaged in mercantile pursuits, but was able to devote a large share of his time to objects of a public and philanthropic character. He is thus described in an obituary published in the public papers of the period:—"There will scarcely be found an instance of any useful or benevolent undertaking, within the proper scope of his exertions, which did not partake of his support, not merely in a pecuniary way, if that were needed, but (which is more important) in personal attention. We admire in many excellent characters an ardour amounting to enthusiasm which attaches them, almost exclusively, to some one favourite object; but William Tuke was a philanthropist of all work. Liberal of his time and labour, wherever these could be brought into use, exemplary in the punctuality of his attendance and in his adherence to the business in hand, and clear in his conceptions of its nature and bearings, he was on all occasions of this nature an able and a welcome coadjutor. In short, he was one of those rare characters who 'are never weary in well doing,' and who accomplish it in the most efficient way."

But while the objects of William Tuke's benevolent exertions were thus various, the subject which undoubtedly most occupied his time and attention, and for which his name will be chiefly remembered, was the establishment of the Retreat at York.

In the year 1791, a lady, a member of the Society of Friends, was placed in the old York Asylum. Her friends, who resided at a distance, requested some of their acquaintance living in the city to pay her a visit. They accordingly went to the Asylum for this purpose, but their request was refused. Very shortly after, the patient died, a circumstance which, in connexion with the conduct of the asylum authorities altogether, excited considerable suspicion, and led William Tuke to feel very strongly the want of an institution for the insane, in the management of which secrecy should be wholly done away with, and which the friends of the patients might therefore regard with confidence. Having a clear perception of a want, he was not the man to remain inactive. It appeared to him that this want might be supplied, and his idea carried out into practice, by a Society which had already exerted itself on behalf of other suffering and neglected classes of the human race. It seemed but fitting to appeal to the friends of the slave and the prisoner, for aid on behalf of those who were incarcerated in loathsome cells, for no other crime than that they had lost their reason.

Accordingly, in the spring of the year 1792, William Tuke made the memorable proposition to a meeting of the Society of Friends held in York, that it should have an institution under its own control, for the care and proper treatment of those who "*laboured under that most afflictive dispensation—the loss of reason.*"

But the proposition was far from meeting, in the first instance, with a cordial

response. Some of the speakers denied the want of any such institution; others maintained that it was entirely out of the province of such an assembly to enter into a consideration of the subject; and the greater part manifested (what might naturally have been expected) little acquaintance either with the extent to which insanity existed, or with the actual condition of the insane. A small number, however, including his eldest son, and the well-known grammarian, Lindley Murray, warmly seconded the proposal. At the subsequent conferences on the subject much fresh evidence, which had been collected, was earnestly put forward, and at length the non-contents were satisfied, and allowed the following resolution to be carried:—*“That in case proper encouragement be given, ground be purchased, and a building be erected sufficient to accommodate thirty patients,* in an airy situation, and at as short a distance from York as may be, so as to have the privilege of retirement; and that there be a few acres for keeping cows, and for garden ground for the family, which will afford scope for the patients to take exercise when that may be prudent and suitable”*—a resolution which indicates, very clearly, the enlightened benevolence of its authors. This was also evinced by the name proposed for the establishment—*“The Retreat”*—by which it was “intended to convey the idea of what such an institution should be, namely, a place in which the unhappy might obtain a refuge; a quiet haven in which the shattered bark might find the means of reparation, or of safety.”

A circumstance may here be related which is of interest, inasmuch as it materially strengthened William Tuke's endeavours to ameliorate the condition of the insane. When turning his attention to the subject, he visited St. Luke's Hospital, in the hope of obtaining information, but was afresh impressed with the necessity of some such institution as the Retreat, by what he witnessed there. He saw the patients miserably coerced, not from intentional cruelty, but from a conviction of the superiority of such a course of treatment over any other. Among them was a young woman, whose condition especially arrested his attention, and excited his compassion. She was without clothing, and lay in some loose, dirty straw, chained to the wall. The form of this unhappy patient haunted him afterwards, and redoubled his exertions, until his plans were carried into practical effect.†

The success of the best plans depends, however, upon the execution. “He had hoped to have found among his numerous friends some one (we may say like himself) devoted to the good of man, and who having leisure for such an engagement would have taken upon him the voluntary and gratuitous superintendence of the establishment. Such a superintendent he thought he had found in a brother-in-law, who had just retired from medical practice, and who entered into the project with much interest. He consented to take the office, at least temporarily, and was in the institution at its opening; but in about two months he was removed by death. The founder looked around among his friends for a suitable successor, but not finding one ready for the engagement, he agreed to undertake the office himself till a substitute should be found, and for nearly twelve months he had the immediate management of the young establishment upon him. This opportunity for close observation, confirmed his estimate of the new Institution, and enlarged his hopes of what might be done, in the improvement of the management of the insane. He only wanted efficient resident agents. Ultimately, the right man was found in the person of George Jepson.

* It was soon found necessary to provide for a larger number; there are at the present time 114 patients in the Retreat, a considerable number of whom are not members of the Society of Friends.

† A few years passed away, and she became an inmate of the York Retreat, and we find its founder observing, in a letter written to an intimate friend, that “she has got settled, and appears more comfortable than at St. Luke's.”

It was, indeed, a rare concurrence of circumstances which brought together two minds, one so capable to design wisely and largely, and the other so admirably fitted to carry such designs into execution.

The two men, though exceedingly different, were one in an earnest love to God and man—in disinterestedness and decision of character; and, therefore, in a steady, conscientious perseverance, which worked onward wherever truth and duty led. Both of them had a strong faith in the dictates of an enlightened conscience, and in the perfect wisdom and love which direct every law of human duty. He was of course initiated into the duties of his office by William Tuke, who long continued his parental care of the institution, and may be said for a considerable time to have been virtually manager-in-chief. When the new superintendent had fully obtained his esteem and confidence, he still continued his vigilant oversight, and, as treasurer, regularly conducted the financial and some other parts of the correspondence of the institution, till the decay of his sight obliged him, in his eighty-eighth year, to close his long and gratuitous services.*

He had the satisfaction of witnessing the complete success of the experiment, not only in regard to its direct and primary object, but also indirectly by its influence upon other asylums for the insane.

He lived to take an active part in the exposure of the cruelties† enacted at the very asylum, the conduct of whose authorities had led, twenty-three years before, to the projection of the Retreat, the published "Description" of which, by his grandson,‡ was the immediate occasion of the controversy which terminated in an entire reformation in the management of the old York Asylum.§

In regard to the views entertained by William Tuke and his fellow-labourers respecting the use of personal restraint, it may be well to state, that while they from the first eschewed the use of chains, hobbles, and other harsh instruments of coercion, and in so doing evinced indubitable boldness and humanity, departing as they did from the treatment advocated and pursued by the highest authorities, they never theorized upon or systematized the subject. They decided conscientiously, and with remarkable judgment, in each individual case as it presented itself, acting rather in accordance with what appeared to them right and reasonable, than following the doctrines of the schools. Although carrying on this experiment contemporaneously with

* "Review of the Early History of the Retreat." 1846.

† "I am not quite satisfied that the past abuses of the Asylum should be referred to in vague and indefinite terms—*fraus latet in generalibus*—nor is it enough to say that squalidity, filth and rags, were in too many instances predominant—or that the means of occupation, amusement, or exercise, scarce existed, for that a hundred patients might, in fine weather, be once a day driven for an hour into a small area, deserves none of these names, or that the cell was fitted to its wretched inhabitants, without light, without air, soaked in urine, and besmeared with ordure."—S. W. NICOLL, Esq. 1814.

‡ "What strenuous efforts fruitlessly combined to accomplish, a little volume, in which this asylum was scarcely mentioned, has at once achieved. I hardly need name Mr. Samuel Tuke's account of the Retreat. Had this interesting work opened the eyes of the old governors, the wonder would have been less; instead of opening, it closed their eyes; the more there was to be seen, the less they would see; the more there was to be done, the less they would do. Mr. Tuke's work, operating on a suspicious and irritable mind, produced the letters signed *Evigilator*, the public attention became roused, doubts and surmises were started. Either confident in right, or daring in wrong, a general challenge was given, that challenge was answered, with what results it is needless to add."—*Vide* "Collection of Papers respecting the York Lunatic Asylum." By S. W. Nicoll, Esq. 1816.

§ The name of Godfrey Higgins, Esq., must never be forgotten in connexion with this subject. What he said of the founder of the Retreat, that "he had reared a monument of goodness to himself, *ære perennius*," may justly be applied to him.

Pinel, they were totally unconscious of the success attending his labours, and had not therefore the advantage of his example.

We need not be surprised that, animated by the same motives, they should in both cases arrive at the same result, namely, the superiority of kindness and judicious treatment over chains and stripes; but in neither instance was the modern doctrine of non-restraint, as set forth by its supporters, asserted; at the same time no one can doubt that then there commenced, in that marked amelioration of the condition of the insane, the real application of those humane principles of treatment, which have in later times led to still more striking results, whether they be found among those who consider "that the use of restraint is never necessary, never justifiable, and always injurious in all cases of lunacy whatever," or among those who only resort to it, as "a necessary evil," in most exceptional cases. Considerable investigation into the early practice pursued at the Retreat induces us to think that the amount of restraint employed was remarkably small, and fully justifies the general description given of it by Dr. Conolly, when he says, "Certainly, restraint was not altogether abolished by them [the early managers of the Retreat], but they undoubtedly began the new system of treatment in this country, and the restraints they did continue to resort to were of the mildest kind."

William Tuke enjoyed the full possession of his mental faculties up to within a week of his death, in 1822; and although blind for several years previously, continued to pursue his active and useful life. Many years before his death, he had occasion to consult the well known Dr. Willan, who singularly enough made the observation, on placing his finger on his wrist,—“There is a pulse which will beat till ninety!”—and so it proved. He was seized while at dinner with a paralytic attack, and for the few following days of his life was more or less delirious. During conscious intervals, however, he was able to converse with those around him, but he was ever a man of few words, and said little more than that he wished to be perfectly quiet; and with a message of affectionate remembrance to the matron of the “Appendage” of the Retreat (which were his last words), he quietly passed away.

He reposes in the same ground where John Woolman, the friend of the slave, is laid; and side by side with Lindley Murray, to whom he was so intimately attached during life—a friendship in unison with the motto on his seal, “Fortior leone amicitia.”

A few words may be added to this brief memoir, in regard to his person and character.

“In person,” writes a cotemporary, “William Tuke hardly reached the middle size, but was erect, portly, and of a firm step. He had a noble forehead, an eagle eye, a commanding voice, and his mien was dignified and patriarchal. In politics,” he adds, “he was invariably Tory, or, as it is now understood, ‘a stanch King’s man.’”

“At the great election of 1807, he spoke from the hustings, in favour of the Hon. Henry Lascelles. A patron of the Bible Society, he attended all its meetings, liberally contributed to its funds, and often edified the members by the weight of his remarks. That saying, ‘Crescit amor nummi, quantum ipsa pecunia crescit,’ was not verified in his example, for he certainly was one of the most disinterested of men.”*

“An object,” writes one who knew him well, “which once seriously engaged his attention, he seldom abandoned, being neither depressed by disappointment nor elated by success; but if circumstances proved untoward in the outset, he could wait with patience the favourable moment, and then pursue his object with all the energies of his mind. It was this complete self-government, united with good judgment and unwearied application, which formed the secret of his success. The faculty of mind, which perhaps most distin-

* “Yorkshire Observer.” 1822.

guished him, was observation. Scarcely any object escaped his attention, and he had an invaluable stock of facts ready to illustrate almost every occasion. On subjects at all within the sphere of his occupations and engagements, his knowledge may be said to have been profound, for he could not rest in a superficial acquaintance with subjects which came before him. His countenance was the very picture of *strength*. His words were of the same character—though few, they were always effective. During the latter part of his life, there was a great mellowing of what might be called the stern features of his character, and increased condescension and gentleness. He might be often seen with his great grandchildren playing upon his knee, and examining with childish curiosity the indentation on his head, caused by the accident which befell him when a boy.”

It would be easy to enlarge upon the traits of William Tuke’s character, and to illustrate the expansive benevolence of his heart, by referring to the many objects of a general and local nature which he originated or supported; but it does not fall within the purpose of the present sketch to enter further into detail. Nor would it befit the entire simplicity of his own character, to load his memory with eulogistic expressions; but in regard to his exertions on behalf of the Insane, and of those who co-operated with him, we may say in conclusion that, “although in this engagement they thought not of fame, and pursued their admirable course with a simplicity, almost amounting to unconsciousness of what they were accomplishing, we trust we do not contravene their noble spirit, in having made them, though dead, to speak, by the holding up of their pious example, to ourselves and others.”*

RESEARCHES INTO THE FUNCTIONS OF THE BRAIN.

BY THOMAS LAYCOCK, M.D.,
Physician to the York Dispensary, &c.

WE are permitted by the kindness of Mr. Churchill to reprint from the last number of the “British and Foreign Medico-Chirurgical Review,” with the sanction of its distinguished and accomplished writer, the subjoined valuable and important paper on the “Functions of the Brain.” We are anxious to bring Dr. Laycock’s highly ingenious and original observations before the readers of the “Psychological Journal,” who naturally take a special and deep interest in this department of cerebral physiology. This essay is highly suggestive. We need not observe that if Dr. Laycock is able fully to substantiate his position, a new light will be thrown upon this department of Physiological Science.—[ED.]

It is now some years since I extended to the cerebrum the doctrines current as to the reflex function of the spinal cord. During the interval which has elapsed, cerebral physiology has sufficiently advanced to warrant an attempt at extending my views into the more metaphysical and obscure regions of consciousness and thought. By way of retrospect, I may be permitted to observe that when engaged in an investigation of certain morbid conditions of the nervous system, as they were presented to my notice nearly twenty years ago in the wards of the York County Hospital (of which I was for some time the resident medical officer), the imperfect nature of the views then current as to cerebral physiology, and their inadequacy to explain or elucidate functional

* “Review of the Early History of the Retreat.” 1846.

diseases of the brain, were continually forced upon me. Physiology afforded hardly any clue to the pathology of mental derangement in any of its forms of reverie and somnambulism, whether natural or artificial, or of those varied morbid manifestations of the consciousness, the perceptions, and the will, which are grouped under the terms hysteria, mesmeric phenomena, &c. Mental philosophy and metaphysics were even less instructive than physiology, for the sum of the practical knowledge they imparted, as to the function of the brain in mental operations, might be stated in the words of Reid: "In perception, the object produces some change in the organ [of special sense]; the organ produces some change upon the nerve; and the nerve produces some change in the brain." The nature of that change, and its relations to the consciousness and the will, appeared to be wholly unknown to mental philosophers, and were only discussed when it was sought to establish some vague and profitless hypothesis. Nay, not a few metaphysicians hardly concede so much as the fundamental proposition, that the brain is the organ of mind, and necessary to the manifestation of its phenomena; for they practically ignore the science of cerebral physiology, and investigate the operations of mind as if the brain took no part in them. How dangerous to scientific and religious truth and morals such a fundamental error may be, is in process of demonstration by the proceedings of "spiritualists" and their congeners, who deduce the wildest and most mischievous doctrines from their experimental researches.

Feeling this want of definite knowledge as to the functions of the brain, and its relation to mental phenomena, when investigating cerebral pathology, I endeavoured to attain to something better, by adopting the inductive method of inquiry. Facts and experimental researches in abundance were not wanting; and I therefore soon reached this general conclusion, that the brain being a congeries of ganglia, did not differ in its laws of action from the other ganglia of the nervous system; and in particular, that like the spinal ganglia, it was subject to the laws of *reflex* action. It followed, therefore, that although, as the organ of conscious mind, its functions were carried on *with* consciousness, yet as being a series of ganglia analogous to the spinal, its functions might be, and often were, carried on *without* consciousness, or at least independently of the will, and of the accompanying sensations, if consciousness existed. This doctrine having been, in the main points, approved and adopted by eminent physiologists and pathologists (amongst whom my friend, Dr. Carpenter, holds a very high rank), may be considered as established; for, although I still stand almost alone in maintaining that in the so-called *sensational* actions, sensation or consciousness takes no share causally, and is only a coincident phenomenon not necessary to the acts, the main proposition, that cerebral action goes on unconsciously, is placed on an irrefragable basis. I would particularly refer to Dr. Carpenter's very lucid demonstration of this part of the doctrine in the fourth edition of his "Principles of Human Physiology," §§ 805—845, and his admirable applications of it to various forms of cerebral disorder, whether arising spontaneously or induced artificially.

On one point, however, I am obliged to differ from Dr. Carpenter—namely, that there is an "*essential* distinction, both in their anatomical and physiological relations, between the sensory ganglia and the cerebrum, or hemispheric ganglia." It has been, on the contrary, a fixed and fundamental doctrine with me, that as to reflex action, there is no *essential* distinction of the kind, the differences being, anatomically and physiologically, rather that of species than genus; nay, that there is no essential distinction in the mode of action of *all* organized structures, whether animal or vegetable, considered in relation to the *fundamental psychological phenomenon* of reflex action, the *intelligent response to stimuli*. So that the laws of reflex action apply to every form of organism, however lowly, and whether it be a plant or an animal; to every kind of tissue, however simple, and whether it be merely a congeries of cells,

or be so highly developed and endowed as the vesicular neurine of the human hemispherical ganglia. Indeed, I need only repeat here what I have previously stated.

"The doctrine of a molecular organization within organized structures, such as that it shall correspond and be appropriate to given stimuli received by appropriate organs, necessarily constitutes the basis of all inquiries into the laws of action in those structures. And there can be no doubt, such is the magnificent uniformity in the infinite diversity of creation, that the laws of action of the agent and reagent in vital phenomena are as definite as those operating on chemical phenomena, could we but effect a sufficiently minute analysis and induction."*

It is only, in short, on the deductions from this all-comprehensive generalization that the basis for a practical and sufficient system of human psychology can be laid.† It may be stated, then, as an admissible general proposition, and therefore of universal experience, that the cerebrum (the organ of thought) may be put into the same modes of action as occur in the other ganglia of the nervous system, when they are rendered active, independently of the will or the consciousness, by their appropriate stimuli; and (to use Dr. Carpenter's words) may act upon impressions transmitted to it, and convey elaborate results, such as we might have attained by the purposive (or volitional) direction of our minds to the subject, *without any consciousness* on our own parts; so that we only become aware of the operation which has taken place, when we compare the result, as it presents itself to our minds after it has been attained, with the materials submitted to the process. To those who have carefully observed the phenomena of thought in relation to the will and the consciousness, this mode of mental action must be a familiar fact; and to those who have studied the phenomena of reflex action, especially as displayed in the instincts of animals, its dependence upon the cerebral functions must be perfectly obvious and comprehensible. On the one hand, therefore, we have consciousness; on the other, unconscious yet intelligent action. These are the *psychological* phenomena. As the common medium of both, we have the cerebrum, the functions of which, in relation to these phenomena, form, therefore, the *physiological* problems to be investigated.

As a preliminary step, some statement of what is meant by reflex phenomena and of their nature is necessary. It has long been known, that animals so mutilated as to be deprived of consciousness, and even mere segments of animals, display, when irritants are applied to the integument, or to the special apparatuses, movements of as definite a character as those which are directed by the will, or are under the guidance of sensations. Very numerous experimental vivisections have been made from time to time, to determine the

* Appendix to Essay on Reflex Function of the Brain, § 3. "British and Foreign Medical Review," vol. xix. p. 308.

† This doctrine has been stated by me on different occasions. In an article on Hysteria (the last of a series), published in the "Edinburgh Medical and Surgical Journal," No. 140, July, 1839, I advocated the identity of function of all vital structures, whether vegetable or animal, ganglionic or cerebral. Again, in my "Treatise on the Nervous Diseases of Women," 1840, (to illustrate which I first commenced these researches), chapters vi.—viii. inclusive are devoted to the elucidation of this doctrine; chap. viii. being headed, "The instinctive actions in relation to consciousness—the brain subject to the laws of reflex action." At the meeting of the British Association, in York, in 1844, I read the paper on the "Reflex Function of the Brain" above mentioned; and in the correspondence with Mr. George Combe, which arose out of the views advanced therein, I again reiterated the doctrine, extending it to reflex nutrition and development. "The development, conservation, and reproduction of all organism," I show, "are regulated by an unerring law of design—a law as generally applicable to living matter as the law of gravity to universal matter."—"Lancet," vol. ii. 1845, p. 256.

true nature of these movements, especially on cold-blooded vertebrata, in which class of vertebrates they are the most obvious. Whytt was one of the earliest of modern physiologists to institute these experiments. He found that "a frog lives and moves its members for half an hour after its head is cut off; nay, when the body of a frog is divided in two, both the anterior and posterior extremities preserve life and a power of motion for a considerable time." Whytt found, also, that although the brain was not necessary to these movements—for they may be continually excited in headless frogs—they were no longer manifested if the spinal cord was destroyed. Whytt observed similar adapted movements in vipers, and believed that they were necessarily connected with *sensation*.

"We have no other way," says he, "to satisfy ourselves that an animal is alive or endued with feeling, than by observing whether it shows uneasiness when anything hurts or tends to destroy any of its parts, and an endeavour to remove or avoid it. Since, therefore, the bodies of vipers make just the same kind of motions, when pricked with a sharp instrument, two or three days after losing their head, heart, and other bowels, as if they were entire, we are naturally led to conclude that they are still in some sense alive, and endowed with feeling—i. e., animated by a sentient principle."

This deduction from the phenomena was adopted by the majority of physiologists after Whytt—as Haller, Cuvier, Dumas, Alison, Le Gallois—and was, in fact, the doctrine generally current until Dr. Hall renewed attention to the subject, and made these experimental vivisections the basis of an improved pathology of certain diseases of the nervous system, specially implicating the *motor* system. He argued that *they were wholly independent of sensation*, and successfully; for there are few modern physiologists who agree with Whytt, Haller, and the rest. There was a contemporary of Haller, however, who gave a most lucid and complete exposition of the whole doctrine of the reflex action of the nervous system, carrying it far beyond the views of Dr. Hall, and extending it to the whole phenomena of animal life. This was J. A. Unzer, whose "*Erste Gründe*" is still the best work of reference on the subject, and still unapproached by modern physiologists.* Prochaska's "*Commentaries*" are but a free summary of Unzer's views, with the more metaphysical and really the more important portion omitted. It was Unzer who first systematically showed the identity of mere reflex phenomena with those that are instinctive and emotional, and explained the share which the states of the consciousness, termed pleasure and pain, have in all these excited acts. He also, of all neurologists, has most successfully made these doctrines elucidate the highest mental phenomena.

The fundamental principles of motor reflex action are these:—That there is an apparatus so contrived as to place the individual in relation with the external world, and receive impressions from it in such a way that, whatever in the external world is good for the organism, is sought after and secured, if possible; and whatever is injurious is avoided or repelled, if possible; secured or repelled automatically and mechanically, without the intervention of any sensation, feeling, thought, volition, or act of conscious mind whatever. That the adapting and *quasi*-rational or sentient agent which combines and regulates the movements of the limbs or other organs to these ends is seated, in nerved animals, in the masses of nerve-cells (vesicular neurine) termed ganglia. That the apparatus by which it acts, consists: *a.* Of a special histological arrangement and constitution of the vesicular neurine in each ganglion, in virtue of which it responds to stimuli according to a fixed and predetermined plan; *b.* Of a special histological arrangement and constitution of the vesicular neurine

* I had the honour and pleasure to translate and edit this work, together with Prochaska's "*Commentaries*," for the Sydenham Society.

on the periphery of the organism, which, coming into contact with the external world, is influenced according to a predetermined plan, and transmits the changes thus induced to the ganglionic vesicular neurine along conductors—the afferent nerves; *c.* Of efferent nerves (distributed to distant organs) which commence within the ganglionic vesicular neurine, and by the changes within which they, in their turn, are influenced, according to a fixed and predetermined plan, transmitting these influences to the motor system; *d.* Of the muscular system, which, receiving through the efferent nerves the influences originating in the ganglionic vesicular neurine, contracts in part, or as a whole, and in so doing puts in motion the varied mechanism already constructed, so that the external world is acted upon through the latter, intelligently and adaptively, to a distinct purpose and object—the preservation in well-being of the individual of the species. The primary object, therefore, of the reflex function of the nervous system is, psychologically, “*nostræ conservatio*,” to use the expressive phrase of Prochaska; the essentially necessary means of its attainment is automatic histological action within masses of vesicular neurine, according to a definite arrangement, and a fixed and predetermined series of changes.

We might rest here, and be content with stating that the cause (or necessary antecedent) to the infinitely varied and exquisitely adapted actions and movements known as reflex, automatic, unconscious, and instinctive, is this definite arrangement and fixed mode of action of the vesicular neurine; but the mind at once perceives the incompleteness of the statement, for it is obvious that there must be a necessary antecedent to the intelligent *action* of the machinery, in the intelligent *construction* of it. If we watch ever so superficially the growth and development of organisms, we are struck by the never-ceasing and ever-varied manifestation of the highest order of intelligence, from the first formation of the primordial cell to the perfect evolution of the entire mechanism of the individual. It is unnecessary to recapitulate illustrations of this general fact. The phenomena it includes have been the source of every variety of speculative philosophy, from Plato downwards; they are the basis of all natural theology; they are the great facts of geology, zoology, and natural history; and are ever connected, in all speculations, with the *instincts*—that is, the intelligent but unconscious *use* of the instruments thus intelligently but (to the individual) unconsciously *constructed*. With the hypotheses and speculations of metaphysical theology and speculative philosophy the inductive method has no sort of connexion—it is the great *fact* that alone concerns us, that there is inherent in the primordial cell of every organism, whether it be animal or vegetable, and in all the tissues which are developed out of it, an intelligent power or agent, which acting in all cases independently of the consciousness of the organism, and whether the latter be endowed with consciousness or not, forms matter into machines and machinery of the most singular complexity with the most exquisite skill and of wondrous beauty, for a fixed, manifest, and predetermined object—namely, the preservation and welfare of the individual, and the continuance of the species. This *quasi*-intelligent agent thus works with an apparently perfect knowledge of number, geometry, mathematics, and of the properties of matter as known to the human intellect under the term “natural philosophy” or physics—that is to say, with a perfect knowledge of chemistry, electricity, magnetism, mechanics, hydraulics, optics, acoustics—but as far transcending the limited knowledge of the human intellect, as the structures and adaptations of living organisms exceed in beauty and fitness the most finished works of man. Speculation apart, and the fact alone considered that such mental powers, so unconsciously acting, are inherent in every form of organized matter, it need no longer be considered novel or surprising that the unconscious operations of the human cerebrum attain to

the perfection they sometimes do attain, or that the blind instincts of animals are so complete, and display so much knowledge of the external world.

The relation between the machines of organisms thus constructed and their actual uses, manifested in reflex phenomena, is too immediate and direct to doubt that the construction and use depend alike upon the same cause. In further developing my views, I shall have occasion to bring forward ample proofs and illustrations of this proposition, but I may here state that, if we were to divide the two classes of phenomena, and assign different causes to each, as has been the custom hitherto, we should only wander away into the hypotheses of speculative philosophy and metaphysical theology, leaving behind us the firm ground of fact and induction, and excluding ourselves from the large and perfectly untrodden field of research which the doctrine advanced opens out to us. I therefore take it as an established principle, that the *quasi-intelligent* agent which operates in the construction of organisms directs the use of the organs constructed.

Having thus traced the intelligent construction and use of organs in living organisms to an unconsciously acting principle of intelligence, as the common source of both, and having identified the results of the unconscious use (or reflex phenomena) with the results of that form of *cerebral* action which is carried on unconsciously,—or, in other words, having shown that the latter are reflex in their nature, it follows, necessarily and obviously, that these reflex *cerebral* phenomena are dependent upon the operation of the same unconsciously acting agent which constructs organs—or, in other words, the unconsciously acting mind of the cerebrum, and the intelligent agent from which constructive and reflex phenomena originate, are identical in their nature and operation. This proposition is the logical and inevitable deduction from the premises; I may add, that it is the logical and inevitable induction from facts, as I shall shortly proceed to demonstrate.*

We have, then, an unconsciously acting principle of intelligence operating upon or through matter in three modes. 1. It moulds and compounds matter into living organisms according to a fixed, predetermined, and unchanging sequence of phenomena or plan, having for its object the good of the individual or of the species, forming machines to this end of great complexity and wonderful adaptability out of simple material elements, and arranging the living

* In thus using the terms “unconscious,” and “unconsciously acting,” I mean them solely to indicate the mental state of the organism itself. An unconsciously acting principle of intelligence is not a new idea, paradoxical as it may appear, for so the soul itself has been designated by modern psychologists. Thus Morell, “The soul, as we have shown, is *prior* to consciousness. It exists *unconsciously* from the formation of the first cell-germ; it operates *unconsciously* throughout all the early processes of life; it acts *unconsciously* even in the greater part of the efforts which subserve our intellectual development.”—“Elements of Psychology,” p. 75. Again, —“The same principle which shows itself in the human organization—which gives form and feature to the body—which adapts all the organs to their several purposes—which constructs the nervous system as the great medium of mental manifestation—which implants the instincts and prompts the senses to their appropriate work—this principle rises in due time to a *self-conscious* activity, in which it can recognise its own Divine origin, and aspire towards its own equally Divine destination.”—*Ibid.* p. 77. Consciousness is, in fact, but one form of *manifestation* of the principle of intelligence. I know of no one word which will *exactly* designate the latter; I, therefore, shall merely use that phrase, or that of unconscious agent. With this strict limitation I may even be permitted to use the phrase *unconscious mind*, synonymously with the phrase unconscious principle of intelligence; mind being, when thus used, synonymous with the “soul” of psychologists. The great source of misapprehension, as Morell remarks, is the notion which confounds the human soul with the human *consciousness*.

structures in such a way that these machines act with the greatest precision and fitness to the purpose for which they are constructed. 2. It *moves* and *regulates* these machines according to fixed, predetermined, and unchanging sequences of phenomena, one change necessarily exciting another by sequential association according to a pre-arranged plan, having for its object the good of the individual or of the species. 3. In animals endowed with consciousness, it acts upon the vesicular neurine contained within the cranium, which it has already constructed, according to a fixed and predetermined order of change, one change necessarily exciting another by sequential association; the *results* of which changes, or series of changes, are presented to the consciousness, and constitute, in part, at least, the phenomena of thought. This is a summary of the actual operations of the unconsciously acting principle of intelligence, irrespective of all theory.

The next step in this inquiry is, to determine the relations which mind and its operations bear to the unconscious principle and its operations. For this purpose, the threefold division just given will be our best guide, for the operations of the mind may be classed also under three corresponding heads—viz., 1. It designedly seeks to subdue and mould matter to its requirements, using for its designs those mental powers or faculties generalized under the term *intellectual*, and which have a *knowledge* of cause and effect, or of the necessary order of events, as the basis of all their operations. 2. It regulates, by an act of will, the current of its thoughts, and the movements of its own bodily organs in their operation (whether mediately or immediately) on the external world. 3. In these processes of thought and of will it acts upon or through the vesicular neurine contained within the cranium, controlling by its means the action of the muscles, and through it attaining to self-consciousness and knowledge of the external world. The problem to solve is, what are the relations, or rather the phenomena, manifested in common by the two forms of intelligence?

First, as to the unconsciously *constructing* principle and its operations. Its phenomena may be considered from a twofold point of view—i.e., as they are manifested in the body itself, in relation with consciousness simply; or abstractedly, as the results of an intelligent agent, and in relation, therefore, with the intellectual powers or faculties of the mind. In regard to the influence of the *constructive* principle of organisms upon the consciousness, little is known, and, as to the majority, little can be known; for with regard to them, it is not possible to say whether consciousness exists or not. Construction, in the sense I use the term, is not limited to *development*, or the first formation of organs, but properly includes *nutrition* (which, strictly speaking, is a continual reconstruction) and separation. The state of the consciousness in *development*, so far as it is manifested in the developing organism, is clearly a state of pleasure. We know nothing of its existence in embryonic or intra-uterine life; but during the period of growth (in all mammals, at least) the operations of the unconsciously constructing principle are associated with physical enjoyment, or a pleasurable feeling of existence. The same condition is observed, but perhaps in a less intense degree, during the process of continued reconstruction, so long as the objects and intentions of the constructing principle are attained. Should, however, its predetermined plans be interrupted, by an imperfect constitution or supply of the nutrient materials, the general feeling of physical *well-being* is changed into one of *ill-being*. At the same time, special painful feelings are felt, in correlation with the efforts of the constructive principle, to obviate the interruption to its predetermined plans; and the sensations of hunger, thirst, want of air, of exercise, of repose, &c., are induced. With these are associated acts and efforts to attain the means by which the predetermined arrangements (which are those of the healthy state) may again come into operation, constituting the *instinctive acts*, or the

so-called reflex phenomena, when directed to the external world; and the operations of the so-called *VIS MEDICATRIX NATURÆ*, when directed to the working of the inner system of machinery. It is not possible to separate these two classes of conservative phenomena, except in this way—*i.e.*, as to the sphere of action of the unconsciously acting principle of intelligence; in respect to their object and origin, they are identical. The effort to supply fluid to the blood (the instinct of thirst), when it is wanted to carry off by dilution any saline or other ingredient through the skin or kidneys, is not different in its nature from any other effort to depurate the blood, when morbid agents have entered it or are retained within it.

I have stated, that in conscious animals the operations of the unconscious principle of intelligence are associated with a feeling of pleasure or well-being if normal, with a feeling of discomfort or suffering if abnormal. But I wish to include amongst conscious animals only man and the vertebrata; as to other organisms, it is as yet an open question whether they feel at all, or if they do feel, whether they feel both pleasure and pain. The phenomena of consciousness are only known to the consciousness. Doubtless the inferences which a man draws from his own experience, as to the feelings of other men, are in the main correct; and in admitting *mammals* and *birds* to brotherhood with him in respect to physical happiness and suffering, he is not far wrong; but it is not correct to lay down as a proposition, that a manifestation in organisms of the *external signs* of happiness and suffering usually manifested by himself, prove that the *feeling* of happiness or of suffering is experienced by them; or that such manifestations, and none other, are alone proofs. *Articulata* are popularly believed to feel acutely; plants are thought to be devoid of feeling altogether; yet the same class of phenomena are manifested by the latter as by the former, through the working of the unconscious principle of intelligence, the real difference being only in the organs and mode in and by which the phenomena are manifested. There is the same intelligent adaptation to circumstances; the same pre-arrangements for the same great objects; the same efforts for the conservation of the individual and the species under varying circumstances; and therefore fundamentally the same instincts. The difference is in the infinite variety of the means and modes. If we compare our own feelings with those of lower animals, we may reasonably admit that they at least enjoy life; for as to our *viscera*, the organs of vegetative life (which in them are pre-eminent), we have no other state of mind than a dim feeling of pleasant physical existence. When they are diseased or injured, we experience acute pain, not referred to anything external, and certainly more acute in proportion as we ascend from savage or uncultivated life, and much more acute, apparently, than in the lower vertebrata. But it is noteworthy, that the pain hardly dwells in our memories. Perhaps in the articulates there may be a dull sense of pain when injured, but no *memory* of pain; so that there is no *fear* of it; and what is felt is limited to the actual *moment* of injury. As to the vegetable kingdom, it is as reasonable an induction, that its members also enjoy life—possibly a *painless* existence—as that they have no consciousness whatever.

However this may be, it is quite certain, that in all conscious animals endowed with a nervous system, without any exception whatever, the special seat of both conscious and of unconscious mind is in that system, or in some part of it. Here, then, is something more than analogy, for there is identity. But since the development of the nervous system itself is the work of the unconsciously constructing principle of intelligence, and is formed by it with a special adaptation to the uses of the conscious mind, its structure does not fundamentally differ from the organized tissues equally so adapted which are devoid of nerves or nervous system. The contrary opinion is an error, which has broadly separated vegetable from animal organisms, and which has given

rise to the hypothesis, that the lowest forms of the latter possess a "diffused" nervous system, microscopically small, or even invisible; it being a notion that the functions of these animals can only be carried on by something of the kind. It is now established, however, that these consist, like the analogous vegetable organisms, of simple cells. It follows, therefore, that the *protozoa* and *proto-phyta* constitute the *dynamical* types of the essential portion of the nervous system—the ganglionic cells in defined groups—or the vesicular neurine, in which the action is probably direct from cell to cell. The point of importance in vegetables is the division of labour amongst the cells, some secreting colouring matter; others, starch, gum, sugar, oil; and another the material for reproduction. Still, all combine to a common purpose—the well-being of the plant, and the continuation of the species.

In the higher animals, and in some vegetable organisms, the functions are more specialised, and are carried on by special apparatuses constructed for the purpose. Food is assimilated by one class,—is carried thus assimilated, to the molecular tissues by another; the results of waste and repair are various, and are carried off by various machinery adapted to the purpose; the germ-cells and sperm-cells are developed also in special tissues—the reproductive organs. There are also weapons for the defence of the organism; apparatus for the prehension of food, and for its mechanical division and preparation previously to assimilation; apparatus for the supply of the oxidizing material; apparatus for the *intus*-connexion of the sperm-cell and the germ-cell, &c. All these require to be combined in action for the attainment of the objects of the organism as a unity, and we have therefore a special apparatus formed for this end, in which that unconscious principle of intelligence, previously (and still, indeed) present alike in all cells, is now specially localized; this apparatus is the nervous system.

The *use* of these various machines and apparatuses, according to a predetermined and fixed plan, is termed *instinctive*.

We have already divided instinct into that which acts consciously, and that which acts unconsciously. Now instinct, in reference to cell-life, may also be divided into the individual and the composite. In the simpler forms of vegetable and animal life the individual existence is *perhaps* typified by the unicellular organisms; it is more certain that the higher animals which are evolved from a single cell are strictly *individuals*—that is to say, indivisible. The composite forms of vegetable and animal life—as yeast, hydras, the diplozoon paradoxon, the various compound entozoa, &c.—are perhaps rather *societies* of unicellular organisms than compound individuals. Be this as it may, it is in the organisms evolved out of a single cell, and in which all the separate organs are co-ordinated to the common object of the organism, that we have the first undeniable example of the *individuum*. Unity manifestly, therefore, precedes consciousness, and is, of necessity, the fundamental or primary idea of the unconscious principle of intelligence. If, then, there be a co-ordinating apparatus, by the operation of which all the separate organs are co-ordinated to the common object of the organism, it necessarily follows that that apparatus must constitute the centre of unity, or of the individual, and therefore the seat of the *ego*, if self-consciousness exist. This has been fixed hypothetically by some physiologists in the medulla oblongata.

Inasmuch as the nervous system, in virtue of its predetermined structure, is the source of the infinitely varied manifestations of intelligence in *action*, and the centre of co-ordination, so also is it the seat of that *great conservative idea*, for the attainment of which co-ordination takes place, inasmuch as the sole object of the entire arrangement is the well-being of the individual or of the species. Since what is true of the whole, is true of every part thereof, it follows that the nervous system is also the seat of all those *quasi*-mental or instinctive powers by which the unconscious mind attains its ends. Now, as

the mind has, in summary, the same ends in view, it is absolutely necessary to inquire into the nature of these fixed arrangements of the vesicular neurine on which the instinctive acts depend, and their relations to consciousness.

It has been shown, that in the *construction* of the various necessary apparatus and instruments by which the great conservative idea is carried out into action, there is manifested a profound *knowledge* of numbers, geometry, mathematics, and of every department of natural philosophy; that is to say, all that the human mind knows of pure and mixed science (and, indeed, infinitely more) is *applied* to constructive art. If we investigate the working of the apparatus thus scientifically constructed, we find that they also are all *used* with an apparent similar knowledge. I refer more particularly to those instincts and instinctive actions in which either the *natural* instruments are used, exclusively and primarily, or else secondarily, for the *construction* of other means of conservation of the latter. No better illustration need be given than that familiar to naturalists, of the mathematical knowledge with which the domestic bee, as a formative artist, constructs its comb. The problem for solution is, to construct the cells with greatest strength, in the least space, and with the least expenditure of material—the daily problem of the human architect. Now this problem is solved by the bee, by selecting the hexagon as the geometrical form; by placing the cells base to base; and by causing the base of each to rest against the point where these partitions meet; thus saving materials and labour, and following out most exactly the principles of solid geometry.

It is a curious mathematical problem, Sydney Smith remarks, in his Lecture on the Faculties of Animals and of Men, at what precise angle the three planes which compose the bottom of a cell ought to meet, in order to make the greatest possible saving, or the least expense of materials and labour. This is one of those problems belonging to the higher parts of mathematics, which are called problems of *maxima* and *minima*. It has been resolved by some mathematicians, particularly by Mr. Maclaurin, by a fluxionary calculation. He has determined precisely the angle required; and he found by the most exact measurement the subject could admit that it is the very angle in which the three planes in the bottom of the cell of a honeycomb do actually meet. Of course, all this knowledge is no part of the consciousness or experience of the insect, yet it would take a senior wrangler at Cambridge ten hours a day for three years together to know enough mathematics for the calculation of these problems, with which not only every queen bee, but every undergraduate grub, is acquainted the moment it is born." I shall presently give an analogous illustration of the application of solid geometry by the unconsciously *constructing* mind to the construction of the *perfect* human form.

The *instinctive use* by the *individual* of the apparatus supplied to it ready made by the unconscious mind, has been always considered as something distinct from the *instinctive construction* of new or more fitting apparatus. From what I have already stated, it follows that there is no fundamental difference in the origin and nature of the two classes of phenomena; one or two illustrations will, however, set the matter in a clearer light. It is matter of common observation, that plants and animals are gradually adapted to any new external circumstances by *structural* changes in the organs of external relation. The leaves, *e.g.*, of the *Ranunculus aquaticus*, differ in structure according as they are above or under the water. If above, they become enlarged and simply lobed; if below, they are more finely cut. If, however, the plant, growing in a moist soil, is not overflowed, then the leaves are so developed, in adaptation to the new circumstances, that a new species, the *Ranunculus hederaceus*, is constituted. The same kind of adaptation to external circumstances is exhibited by almost every kind of animal; the more remarkable and obvious being those in which changes in temperature and climate have to be provided for. Thus, we have hair changed into wool in a cold climate, or wool

into hair in a hot; so also the variations in the colouring matter of animals. These facts are familiar to naturalists, and are those which Lamarck has generalized into a system in his "Philosophie Zoologique." It is of importance to remember that this instinctive construction is not limited to changes in the leaves, limbs, &c., of organisms, but extends also to the co-ordinating apparatus, so that new instincts are developed in lower animals, and "habits," and new sources of pleasure in man. To this category may be referred, indeed, every phenomenon of this kind, including the acclimatization of animals and vegetables, the production of varieties by domestic culture, &c.

With the development of new vesicular arrangements, new apparatus, and new instincts, or instinctive actions, there is not unfrequently a repression, suppression, or deprivation of some of those which belong to the original type of the species. It is worthy of notice, however, that they are never absolutely eradicated; for when the appropriate stimuli (long absent from the race, perhaps) are again applied, the corresponding instinct reappears. As an illustration the following may be mentioned. The straw which has been used for bedding the *carnivora* in Wombwell's menageries is sold, and is capable of further use. Straw that had bedded the lions was made into bedding for some horses, and the latter immediately showed signs of alarm on entering the stable, snorting, snuffing, and trembling at the unwonted odour. Now it is certain that for many generations the English horse has had no experience of these his natural enemies, and his instinct of self-defence as regards them never exercised; yet the predetermined arrangement of the vesicular neurine in connexion with the sense of smell and the preservation from violent death was still there, and was duly brought into action so soon as the stimulus to which the arrangement is adapted was duly applied. Numerous similar examples of the persistence of these fixed arrangements might be adduced from the natural history of domestic animals, whether retained in the society of man, or passing again into a wild or half-wild life.*

As illustrative of the common source and nature of the instinctive use and construction of organs, I may mention changes in the colour, form, &c., of animals occurring under the immediate influence of instinct; as when concealment is desired, either to avoid enemies or seize prey. Insects, fishes, reptiles, birds, in numerous instances assimilate their colour to that of surrounding things, or change their colour (as the chameleon) in a moment. The loss and reproduction of limbs under the influence of the instincts belong to the same class of phenomena.

The habits of the solitary wasp, referred to by Sydney Smith, is an apt illustration of another point of view of this matter, inasmuch as it shows instinctive *action* in one form of organism taking the place of instinctive *construction* in others. In numerous animals, as well as in vegetables, the primordial cell is imbedded in a nutrient material contained within a shell or case, the whole constituting the egg or seed. The yolk of the egg (the nutrient part) is not only expressly adapted chemically to the wants of the growing animal, but is also exactly proportioned in *quantity*, so that when it is exhausted, the young being can either obtain food for itself, or is supplied by its parent. In mammals

* A sheep farmer has just stated to me an illustration of this principle, which I mention as showing the practical bearing of these views. Complaining of the loss of lambs he had experienced in consequence of the cold spring, I asked why he had not suitable lying-in hospitals constructed for the ewes, and he replied, one reason was, that only the Southdown (the highly-bred ewe) would submit to restraint. The ewe of the Cheviot breed, and of the black-faced or mountain sheep, *would* wander away to drop her lamb by herself, and was not easily restrained. The latter also display an impatience of being touched or handled by man, which the more civilized Southdown never manifests. Their semi-wild state on the mountain and moor pasture is clearly the source of these peculiarities.

the ovum is placed in the uterus, and is supplied by the circulating system of the parent with nutrient material. In many of the *hymenoptera* the whole business of the active life of the insect consists in the carrying out of these ends of the unconscious principle of intelligence. The construction of the case or receptacle for the ovum, and the filling it with provisions, manifest some of the most singular and interesting efforts of the reproductive instinct. As a special illustration may be mentioned that of the solitary wasp, which supplies to its ovum both a case and a suitable nutrient material. She digs several holes in the sand, in each of which she deposits an egg. Next (I quote Sydney Smith),

"She collects a few green flies, rolls them up neatly in separate parcels (like Bologna sausages), and stuffs one parcel into each hole, where an egg is deposited. When the wasp-worm is hatched, it finds a store of provisions ready made; and, what is most curious, the quantity allotted to each is *exactly sufficient to support it* till it attains the period of wasphood, and can provide for itself."

This instinct of the parent wasp is the more remarkable, as it does not feed upon the food it supplies to the ovum. An analogous instance of constructive development is seen in the economy of bees, when a queen or prolific female is wanted to be developed, and the bees supply certain larvæ with a special kind of food suitable to produce the required effect, the latter not being able to obtain it for themselves under the guidance of their own appetites. In short, it may be stated generally, that bees possess a power in the management of their offspring far beyond the power of man; for, by virtue of their instincts, they can develop them into males, females, or neuters, as the wants of their society demand. Strictly, a hive of bees is analogous to a composite animal, for these remarkable reproductive instincts are nothing else than the means by which the objects of the unconsciously *constructing* agent are specially attained in the individual. That which in vertebrates is secured by the laws of embryonic development, is attained in the *hymenoptera* (and indeed in *insecta* generally) by the instincts of the individual, or the society.

Another form of instinct remains to be noticed—namely, the adaptive direction of apparatuses and instruments already formed to the attainment of the wants of the individual under *new* circumstances. The class of acts thus caused have been designated *rational*, or adduced as instances of *reason*. They are, I think, not such in the common meaning of the terms. Mr. Gardner records, in his "Travels in Brazil," the following instance of apparent reason in a crab, a small species, belonging to the genus *Gelasimus*. It was either making or enlarging its burrow in the sand, and about once in every two minutes it came up to the surface with a quantity of sand enclosed in its left claw, which by a sudden jerk it ejected to a distance of about six inches. Mr. Gardner threw a small shell into its hole, others remaining within a few inches of it. In about five minutes the crab brought up the shell, and carried it to a distance of about a foot from its burrow. Seeing the others lying near the mouth of the hole, it immediately carried them one by one to the place where it placed the first, and then returned to its labour. In this and numerous similar instances, common to all animals, a higher manifestation of the unconscious soul is shown than occurs in those which are in immediate and direct dependence upon fixed arrangements in the vesicular neurine. It is the connecting link between instinct and reason; but it is not a manifestation of the knowing and willing *self-conscious* mind. In man, numerous similar acts are manifested during infancy and childhood.

It is obvious, then, that the unconscious soul, when constructing the co-ordinating apparatus, whether during development or in after-life, writes within it, as it were, its own principles of knowledge; and thenceforward the nervous system acts as wisely and as sagaciously as if endowed with mind, in all those

actions which are independent of the will or the reason. The invariable sameness and permanence of the instinct in successive generations (the external circumstances being the same in each generation), and the transmission of acquired instincts and habits (the circumstances being different), constitute a strong argument in proof of the doctrine that they are dependent on special arrangements of the vesicular neurine—an argument confirmed by the numerous vivisections instituted to demonstrate the nature of reflex phenomena, all of which establish the fact, that *integrity of structure of the vesicular neurine* is the essential requisite to reflex movements. These special arrangements I have already designated the substrata of psychical phenomena.* These combinations or masses of nerve-cells are subject to the ordinary laws of quasi-mental action according to a fixed plan, whether they be formed during the life of the individual, or acquired by hereditary transmission; they have equally their appropriate stimuli, their appropriate progressive development, or their retrogressive change; and, singly or in combination, they may lead to the evolution of new masses of vesicular neurine, and new modes of mental action. Whatever may be their course, however, these arrangements of the vesicular neurine correspond in function (sensorial or motor) to the ideas, conceptions, and intentions of the unconscious mind. To the conscious mind of the organism their relation is wholly this—namely, that they enable it to attain to that which it desires, or to avoid that which it dislikes. If the appropriate stimuli be carried to the vesicular neurine and awake it into its proper functional activity, this vital machinery is duly put into operation. The corresponding change in the state of the consciousness is this, that if the stimuli reaching the vesicular neurine be in harmony with the modes of action writ upon it by the unconscious principle of intelligence, and changes follow in harmony with the objects it has in view, a feeling of pleasure is induced; but if the stimuli be not in correspondence with the fixed pre-determined mode of action of the vesicular neurine, and with the objects of the unconscious mind, pain or unhappiness results. This is, I think, an accurate general statement of the knowledge we have as to the relations of the inner working of its organ to the consciousness.

Our next step brings us into the field of human neurology and psychology. The unconscious soul of man, acting within the cerebrum, has its substrata—placed there *ab initio*, or constructed anew. What are they? and what are their relations to the consciousness? We shall find that the two forms of mental manifestation have a common origin and a common substratum, and that *the human mind is none other than the unconsciously working principle of intelligence individualized, becomes conscious of its own workings in the cerebrum, and deriving its ideas from its own constructive or material changes in the organ of mind.* This proposition I shall now proceed to demonstrate by a series of illustrations. First, as to consciousness itself.

The mind is One—a unity. "The unity of consciousness is at once the deepest, rarest fact of our nature, and the most rigid condition for a complete mental philosophy."†

This unity is to be found in the identity of the conscious and unconscious mind. I have already shown that, as regards the latter, the organism is an *individuum*, and that, therefore, unity is its primary idea and prime object. It is thus the *self*-conscious mind exists; its own existence as an *individual*—as a unit—implies the idea of its existence as a something distinct from everything else. This is its fundamental intuition or conviction. This conviction it retains so long as the co-ordinating apparatus within the cranium duly and

* On the Reflex Function of the Brain: § 3. The Substrata of Psychical Phenomena. "British and Foreign Medical Review," vol. xix. p. 308.

† Morell: "Elements of Psychology," p. 19.

normally fulfils its functions; if, however, these be interrupted, then the state of unconsciousness supervenes—or, in other words, consciousness (and therefore with *self-consciousness*) is abolished. The exact locality in the encephalon which is the seat of consciousness—or, in other words, the centre of corporeal and mental unity—fixed by some in the medulla oblongata—is still undetermined; but that there is a central point, composed of vesicular neurine, in which the sum total of the functional activity of the organism is felt, and whence there is a reaction (reflex action) upon all the structures which minister to the physical well-being of the organism, is as certain as that every organism is *developed* from a common centre—the primordial cell.

Writers use the term *double* consciousness in reference to certain states of the mind in which the individual manifests, as it were, two distinct forms of mental life. A more correct term would be *alternating* consciousness, since it is most probable that the phenomena depend upon alternating independent action of each half of the cerebrum; but whatever may be the explanation, it is certain that the phenomena in question can never establish the doctrine of a *duality* of consciousness. Sir H. Holland appears to have set this point at rest.*

The unity of consciousness implies another fundamental principle—namely, that the varying states in which the latter exists are *successive*, and not contemporaneous. The mind cannot be occupied with two objects at identically the same moment. To assert the contrary proposition (a popular error) is to assert that the consciousness is divisible; whereas its unity implies its *indivisibility*.

“Sensation is not the object of consciousness different from itself, but is the *consciousness of the moment*; as a particular hope, or fear, or grief, or simple remembrance, may be the actual consciousness of the next moment. In short, if the mind of man, and all the changes which take place in it, from the first feeling with which life commenced, to the last with which it closes, could be made visible to any other thinking being, a *certain series of feelings alone*—that is to say, a certain number of successive states of the mind—would be distinguishable in it, forming, indeed, a variety of sensations, and thoughts, and passions, as momentary states of the mind, but all of them existing individually and successively to each other.”†

I know of no inquiry into this part of mental physiology more lucid or more instructive than Sir Henry Holland's, and to his chapter On Mental Consciousness in Relation to Time and Succession, I would specially refer the reader.‡

The unity of consciousness implies another fundamental principle—that whatever changes in the vesicular neurine are presented to, or reach, the consciousness, and excite therein feelings, sensations, ideas or thoughts, are accompanied with a conviction of *truth* and *reality* as to the latter, whatever may be the source of the change; that is to say, whether it arise from morbid or healthy cerebral action.

“When we speak of the *evidence of consciousness*,” Brown remarks, “we mean nothing more than the evidence implied in the mere existence of our sensations, thoughts, desires, which it is utterly impossible for us to believe to be and not to be; or, in other words, impossible for us to *feel* and *not to feel* at the same moment.”

Now, the ideas which are continuously and fixedly thus believed, in all normal states of the mind, are those termed *intuitive* truths, *innate* ideas, &c.

* “Chapters on Mental Physiology:” chap. viii., On the Brain as a Double Organ.

† Brown: “Lectures on the Philosophy of the Human Mind”—On Personal Identity.

‡ “Chapters on Mental Physiology,” &c., p. 46 et seq.

They are dependent upon fixed and, in normal states of the cerebrum, unchanging arrangements and modes of action of the vesicular neurine; being such, they are writ upon the organism by the unconscious soul itself, are therefore its fixed and unalterable truths, and are to the human mind the *intuitions of pure reason*.

But what if the cerebral structure be disordered, either as to its vesicular arrangements, or its modes of action? Abnormal states of the consciousness will be induced; but, so long as consciousness exists, the mind will still feel convinced that the representations to the consciousness, which are presented in these disordered modes of action of the vesicular neurine, are real and true. The most common illustration of this fundamental principle is the state of the consciousness in dreaming, in which, as every one knows by personal experience, ideas the most absurd and the most incongruous as to time and space, are fully and indubitably believed. In artificial reverie, induced by the so-called electro-biological processes, an analogous state of the vesicular neurine and of the consciousness is induced; so also in artificially induced somnambulism, spectral illusions (clairvoyance), &c. In these the disordered action of the vesicular neurine is wholly functional and transitory; but in the delusions of the monomaniac they are permanent, and hence it happens that whenever that portion of the vesicular neurine which, in him, is the seat of the morbid action, is brought within the series of changes then being presented to the consciousness, the normal and therefore true succession of ideas is interrupted, and the abnormal and false occupy the mind fixedly, and, for some moments at least, to the exclusion of all others. This morbid presentation to the consciousness comes (like all others) with all the reality of truth, and, in proportion as it is continuous in time, it occupies the mind; for it is only by the constant succession of these changes in associated sequence, that erroneous ideas are corrected. Erroneous states of consciousness probably occur at many moments of our waking lives; not one of our senses is to be depended upon; but there is a pre-ordained mutual control and correction of each other in healthy action, which is destroyed in dreaming and other abnormal states of the cerebrum. The detection of monomaniacal delusions is sometimes difficult, because the patient, being keenly conscious of his infirmities, will conceal them; if, however, by what is termed the association of ideas, the morbid action of the vesicular neurine be brought within the current of his thoughts, he becomes utterly powerless to resist it—as much so as the electro-biologised to resist the suggestions presented to their minds. The formation of these monomaniacal *substrata* is due (as all observation shows) to the fixity of the mind on one idea, or class of ideas, at a time when, from morbid changes induced in the vesicular neurine (as by undue mental labour, intense emotional excitement, want of repose, the development of a dormant predisposition, and the like), it is unusually susceptible of the operation of the unconsciously constructing mind; so that the fixed ideas become deeply writ, as it were, on the vesicular neurine, just as acquired instincts, habits, &c.; and are, in fact, as difficult to remove.

The intuitive conviction of *continuous* existence in time and space, known as the feeling of *personal identity*, has a more complex origin than is usually laid down. It implies two fundamental requisites—namely, a *perception* of the external world and *memory*, together with all their dependent faculties and modes of action. In that state of the consciousness which is a feeling simply of pleasure or of pain, there is no reference to the external world; in the higher state of *self-consciousness*, there is the latter necessarily, because the unconscious mind provides, by its inner vesicular arrangements, for the external world. It not only aims at the well-being of the organism, but provides, by its predetermined plan of construction and action, for the acquisition from without of what is beneficial, and the expulsion or repulsion of what is

obnoxious. This is what the unconscious mind aims at; it follows, therefore, that as the conscious mind it desires them. The completion of the desire is accompanied by a feeling of pleasure, inasmuch as that completion is in congruity with the predetermined arrangements of the unconscious mind, which feeling is termed *satisfaction*, joy, pleasure. The desire to attain the good is usually termed *desire*, simply to avoid the evil is termed *abhorrence*. Now just as the unconsciously constructing principle of intelligence adapts the inner vesicular arrangements to external circumstances in plants and in the lower organisms, and so develops new instincts and instruments, so also, during the operations of the conscious mind, it constructs or arranges the vesicular neurine in accordance with its operations. These changes, whenever they are such that they can be presented to the consciousness, will come within the continually flowing series of states of the latter, which constitute the sum of mental existence; and being thus the unconsciously-written record in the vesicular neurine of the successive operations of the mind, constitute the material *substrata of memory*. The substrata, therefore, of acquired instincts, habits, &c., and of memory, are due to a common cause and common mode of action; the former, when transmitted, constitute, in fact, the *memory of the species*; the difference is in the relation of the respective substrata to the states of consciousness, and its relations to the external world.

It is not possible to comprehend the phenomena of memory without the concession of the doctrine, that the mind thus working unconsciously, continually constructs or arranges the vesicular neurine of the cerebrum. In his lucid chapter, "On the Memory as affected by Age and Disease," Sir Henry Holland mentions several interesting illustrations of the general fact—"That, of all the intellectual powers, it depends most on organized structure for whatever concerns its completeness, its changes, and decay," but has strongly experienced the absolute insufficiency of all theories founded on the connexion of memory with organization to explain several of its phenomena. It is, perhaps, in the doctrine I have just advanced that a more satisfactory explanation may be found. These substrata of memory are essential to the feeling of personal identity—i.e., of continued existence in time. The idea of continued existence includes the ideas of the past and the future. It is an intuition that we shall continue to exist, as well as that we have existed. Now this idea of the future is a fundamental idea of the unconscious principle of intelligence—equally fundamental as the idea of unity itself. Its aims and acts are all, without exception, *prescient*; the continued existence—i.e., the existence in time to come of the individual or of the species—is its great object. Hence, the infinite variety of prescient instincts displayed by all organisms, whether animal or vegetable; hence the instinct for continued existence, or love of life, and the universal abhorrence of death; hence it is that "men think all men mortal but themselves." In desire, the idea of the future is necessarily involved, whether it is a good we desire to acquire, or an evil we desire to avoid. The desire realized is the present, often too quickly to become a thing of the past.

Morbid conditions of the vesicular neurine develop correlative states of the consciousness in reference to these fundamental intuitions. *Neuralgia*—i.e., an ache or pain, simply dependent on a morbid state of a nerve or a ganglion of common sensation, and constituting a modification of the primary form of consciousness—is one. *Melancholia* is a higher morbid state in which evil is anticipated, or believed to have occurred; it is, however, precisely analogous to neuralgia in its nature. In the kind of dreams in which everything goes wrong, and in "low spirits," when all kinds of anxious fears are experienced, we have a condition analogous to the condition of the vesicular neurine in melancholia, only in the latter the condition is permanent, in the former it is transient. Melancholia has been termed phrenalgia by Guislain, and in one sense the term is correct; it is a term of doubtful meaning, however, for it

may imply that the sources of the states of consciousness grouped under the term are in the mind itself; whereas they spring from morbid modifications of the vesicular neurine. The state of consciousness induced is precisely antagonistic to the aims and objects of the principle of intelligence, which is happiness, and to that experienced in the normal condition of the neurine: hence it is, that things pleasurable naturally become changed in their effects: rightly, therefore, the melancholic Hamlet says of the highest source of natural pleasure—"This most excellent canopy, the air; look you, this brave o'erhanging firmament, this majestical roof fretted with golden fire, why, it appears no other thing to me than a foul and pestilent congregation of vapours." In the same way it is that, in neuralgia, impressions ordinarily agreeable—as of light, sounds, touches—are the sources of acute pain.

Neuralgia, in its primary and simplest form, is pain only; but there are forms in which there are painful illusive sensations, as of pricking, stinging, burning, coldness, &c.; in these there is a reference to a cause external to the organism. Closely related to these, are the illusions of the hypochondriac as to his bodily sensations, and as to the morbid states of his viscera: and in intimate connexion with these latter are those morbid states in which there are delusions as to what may be termed the anatomy and intimate construction of the body or its parts. Thus, melancholic patients will assert that they have no stomach, no bowels, no head, no soul; that they, or some portions of them are made of butter, glass, or something else easily destructible. They will have delusions as to their personal identity, as to their preservation in general (fear of death, vague apprehensions); or as to their danger from particular sources of injury (suspecting melancholia). Now, just as in neuralgia there is a complete perversion of the predetermined responsiveness to impressions, so in melancholia there may be a complete perversion of the predetermined instincts and modes of thought; and the trembling melancholic—who expects and dreads his death, flies from the most trivial things, in terror of death at every moment—becomes profoundly suicidal. The transition from a morbid condition of this kind to that in which the active instincts of defence are roused, is a natural and not unfrequent occurrence, so that the suicidal is often a homicidal maniac; or else the nutrient instincts are involved, and the hypochondriacal dread of being poisoned passes into the maniacal determination to take no food, or to take poison. This doctrine of the pathology of melancholia is equally applicable to all forms of the disease.

The preceding illustrations of the relation which the instincts and emotions bear to the vesicular neurine, and through it to the unconscious principle of intelligence, are, I trust, amply sufficient to show the exact correlation between the latter, and conscious mind in all modes of thought and states of consciousness in which the instincts, emotions, and passions, are predominant. I will now submit illustrations taken from the domain of the intellectual powers, and will select two points of special and comprehensive importance—namely, reason, or intelligence, itself, and intellectual pleasure, or happiness.

An act of the reason implies a knowledge of the qualities of matter; the primary idea, therefore, of the intelligence, must be the intuitive idea that matter exists. Now, the external world, and the qualities of matter in relation to the organism, constitute the study, if the phrase may be permitted, of the unconscious mind; correlatively, therefore, these are the study of the conscious mind. The first rise of the *ego* of self-consciousness is in the perception of that which is not a part of the individual, or external to it. The body is a unity that it may be the more effectually protected from external injurious agents, and secure its well-being and the happiness of the soul which it clothes. The evolution of all the apparatuses and instruments of sense, in particular, has the special end in view of placing the seat of unity and consciousness in instantaneous and intimate communication with the external world, through what may be termed prolongations, or projections outwards, of

the vesicular neurine; for the nerves of special sense are virtually nothing else than portions of the grey matter spread out on apparatus suitably constructed for the reception of the influences which matter can exercise upon the vesicular neurine of the cerebrum, itself also especially arranged for being influenced by them. All the nerves, therefore, of special sensation at least (or, in other words, *all* sensory nerves, exclusive of those which minister to pleasure and pain only), have a common function and common principle of action. They may be considered as nerves of touch. This being the fundamental aim and method of the principle of intelligence, it follows that all changes in the consciousness consequent upon changes in the sensorial ganglia are accompanied with the conviction that the sensations arise externally. As to tactile impressions, this may appear of doubtful application; but it must be remembered, that the entire body is external to the consciousness. It is probable, that in a perfect act of perception all the senses co-operate in the act, and erroneous ideas are prevented by that predetermined mutual control and combination to a given end which I have already referred to as part of the function of the vesicular neurine. In morbid states of the latter, as in neuralgia of a stump, the mind refers the seat of pain to a point altogether apart and external to the true seat, because there is no provision for a correction of the impression. In auditory or visual illusions, dependent on cerebral disease, the same result is observed if the person be insane; or, in other words, if the cerebrum be so disordered that the necessary correction cannot be made. This idea of *outness* is fundamental to all perceptions.

The ideas of *power* and of *causation* (or cause and effect) arise in the mind in the same way. We have seen that it is the aim or idea of the unconscious agent, in laying down the predetermined arrangements of the organization, that they shall invariably respond to the same stimuli; this idea is reproduced as a state of the consciousness, and is the idea that they will, for the future, so respond:

"Why is it, then," says Brown, "that we believe in that continual similarity of the future to the past which constitutes, or at least is implied, in our notions of power? A stone tends to the earth—a stone will tend to the earth—are not the same propositions, nor can the first be said to involve the second. It is not to experience, then, alone that we must have recourse for the origin of the belief, but to some other principle, which converts the simple facts of experience into a general expectation or confidence that is afterwards to be *physically* the guide of all our plans and actions. This principle, since it cannot be derived from experience itself which relates only to the past, must be an original principle of our nature. There is a tendency in the very constitution of the mind, from which the expectation arises—a tendency that, in everything which adds to the mere facts of experience, may truly be termed instinctive." (Op. cit., vol. i. p. 121.)

When a stimulus or impression has excited the functional activity of any predetermined arrangements of the vesicular neurine, to which it is adapted, the state of consciousness corresponding thereto is correlative with the idea of the unconscious principle of intelligence; now it is the aim of the latter that that effect should be so produced invariably, consequently that which invariably precedes a change in the state of the consciousness is connected in the mind with the idea of a *cause*; hence the idea of *causation*. Thus Brown:

"A cause is, perhaps, not that which has merely once preceded an event, but we give the name to that which has always been followed by a certain event, and, according to our belief, *will continue* to be in future followed by that event, as its immediate consequent; and causation, power, or any other synonymous words which we may use, express nothing more than this permanent relation of that which has preceded to that which has followed To know the *powers* of nature is, then, nothing more than to know what antecedents *are* and *will be* invariably followed by what consequents." (p. 120.)

This is, in fact, the foundation of all science. Nature is nothing else than

the predetermined arrangements in operation of the great creating and sustaining Intelligence, which it is the duty of man, a "*natura minister et interpres*," to know. The faculty by which he ascertains these invariable relations of phenomena to each other, is termed *comparison*.

I could thus go through all our fundamental ideas and all our intuitive truths, and show that in them all the states of consciousness of the self-conscious mind are correlative with the ideas manifested in organization by the unconscious mind; and that it is from the manifestations of the latter in and through the functional activity of the predetermined arrangements in the vesicular neurine, that all thoughts arise into our consciousness. There can be no doubt whatever, whether we consider the deductions to be drawn from observations of the form of men's crania, from the investigations of pathology and pathological anatomy, from the facts of comparative anatomy and zoology, and from the laws of embryology, or whether we consider the general laws of psychology as displayed in the operations of the unconscious mind—that, just as there is a differentiation in the tissues and structure of the body, to secure its well-being and continuance,* so also there is a differentiation in the co-ordinating apparatus itself, to secure a knowledge of the external world. The result of this is a constant localization and specialization of function, so that masses of vesicular neurine are progressively appropriated to the mental powers as they are evolved, extent of neurine being correlative, *mutatis mutandis*, with extent of manifestation of the power. In these masses there is the same fixed responsiveness to the appropriate stimuli, as in the ganglia with simpler endowments; the same correlation between the ideas of the unconsciously constructing mind and the consciously thinking mind; and the same relation between the appropriate responsiveness to stimuli of the neurine and the states of consciousness known as pleasure and pain. The fundamental modes of action of the human mind and its organs are really, therefore, *instinctive*.

It is a remarkable circumstance, that while metaphysicians and phrenologists have alike almost unanimously advocated or adopted this doctrine, it has never been applied to the elucidation of the nature of mind, by constituting it the starting point of a *comparative psychology*.†

* See Dr. Carpenter's "Principles of Comparative Physiology," fourth edition, pp. 18—20, 38, for a statement and illustration of this fundamental process.

† I subjoin the following rather long extract from Sir W. Hamilton's Note A (p. 761), in his "Dissertations," &c., supplementary to his edition of "Reid's Works," on account of the vast importance of this doctrine to mental physiology and pathology: "An instinct is an agent which performs blindly and ignorantly a work of intelligence and knowledge. The terms *instinctive belief—judgment—cognition*, are, therefore, expressions not ill adapted to characterize a belief, judgment, cognition, which, as the result of no anterior consciousness, is, like the products of animal instinct, the intelligent effect of (as far as we are concerned) an unknowing cause. In like manner, we can hardly find more suitable expressions to indicate those incomprehensible spontaneities themselves, of which the primary facts of consciousness are the manifestations, than *rational or intellectual instincts*. In fact, if Reason can be justly called a developed Feeling, it may with no less propriety be called an illuminated Instinct—in the words of Ovid—

'Et quod nunc Ratio, Impetus ante fuit.'

As to [Reid's use of the term being] an innovation either in language or philosophy, this objection only betrays the ignorance of the objector. Mr. Stewart ("Essays," p. 87, 4to edition) adduces Boscovich and D'Alembert as authorities for the employment of the terms Instinct and Instinctive, in Reid's signification. But before Reid he might have found them *thus* applied by Cicero, Scaliger, Bacon, Herbert, Descartes, Rapin, Pascal, Poiret, Barrow, Leibnitz, Musæus, Feuerlin, Hume, Bayer, Kames, Reimarus, and a host of others; while, subsequent to the 'Inquiry into the Human Mind,' besides Beattie, Oswald, Campbell, Fergusson, among our Scottish philosophers, we have, with Hemsterhuis in Holland, in Germany Petens,

I will now examine into the source and conditions of *intellectual pleasure* in relation to the cerebrum, taking as a starting-point the doctrine that this organ is the seat of the intellectual instincts. It is necessary to the manifestation of these instincts in consciousness, that is to say, in thought and knowledge, that there be a predetermined arrangement of the vesicular neurine—psychical substrata—corresponding to each, so that when the appropriate stimuli reach it, the corresponding states of consciousness (or sequences—associations—of ideas) may follow. It is necessary to the *perfect* manifestation of these instincts that the aims, conceptions, or ideas of the unconscious mind be writ within the vesicular neurine. Now, we have seen that these are founded upon a profound (perhaps perfect) knowledge of the laws of matter, whether they be physical, chemical, or vital; it is, therefore, a necessary inference that the human cerebrum is, *potentially* at least, the seat of this knowledge; or, in other words, that by a suitable development of the material substratum, through the agency of the unconscious mind, the human mind *may* attain to this knowledge to a greater or less extent, and that the elementary principles of all branches of science may be more or less innate or intuitive. We have seen how the bee is an intuitive builder according to the most correct mathematical formula, in virtue of the same properties which we would assign to man. Now, the first instinct of human nature, and perhaps the highest intellectual pleasure, is to seek after and attain to knowledge*—knowledge of the world around him, knowledge of himself, knowledge of his relations to his Creator and his fellow-creatures. He is ever endeavouring to know the order of nature, or the causes of things—i. e., what is the necessary antecedent to a consequent; for it is knowledge only which gives him the freedom he continually strains after, and the dominion over matter he would conquer. *Felix qui potuit rerum cognoscere causas* is the sentiment of every man. This general use of the intellectual faculties, and the happiness consequent on the right use, is strictly analogous to that general use of the corporeal organs which constitutes the sum of life, and is, when normally carried on, the source of the feeling of corporeal happiness.

The unconscious principle of intelligence, as a constructive agent, aims not at the good only—*τὸ εὖ*; ever conjoined therewith is the beautiful—*τὸ καλὸς*. In the conscious mind this aim at the beautiful becomes a *desire*, when the vesicular neurine is appropriately evolved. Hence it is that amongst the special intellectual pleasures of which man is capable of feeling, are those derived from the fine arts—namely, music, painting, sculpture, architecture, and formative arts generally. These arts being practised by the unconscious mind in the construction of organisms, and in the instincts of lower animals, they present the best subjects for comparison and elucidation. Perhaps the human form may be reasonably assumed as the form the contemplation of which (when perfect) gives the highest intellectual pleasure. It may be considered under two aspects, first as constructed by the principle of intelligence; secondly, as constructed by man. According to the doctrine I wish to establish, the psychical substrata (the work of the unconscious mind), by and

Jacobi, Bouterweck, Neeb, Köppen, Ancillon, and many other metaphysicians, who have adopted and defended the expressions. In fact, Instinct has been for ages familiarized as a philosophical term in the sense in question—that is, in application to the higher faculties of mind, intellectual and moral. . . . In a moral relation, as a name for the natural tendencies to virtue, it was familiarly employed even by the philosophers of the sixteenth century . . . and in the seventeenth it had become, in fact, their usual appellation."

* There is an admirable little work on this subject, to which I would specially refer the reader, and the more earnestly because its value is not generally known—Sir John Forbes' "Happiness in Relation to Work and Knowledge: an Introductory Lecture," &c. Smith, Elder, and Co., Cornhill; or Churchill.

through which the beauty of the human form is felt and perceived, will be correlative with the constructive ideas and conceptions of the unconscious principle of intelligence (or nature, as it is usually designated); so that when the visual impression of a perfect human form reaches substrata perfectly evolved, there is congruity between the latter and the former; and the resulting changes in the consciousness in reference to the visual object are accompanied by that change in the consciousness termed pleasure. The same doctrine applies equally to all artistic impressions derived from the results of true formative art, whether seen in vases and objects of virtù, or in the grander architectural products of human genius; to all æsthetic combinations of colour; to the infinite variety of sweet concords. The recipient senses having an analogous structure, and a common function in relation to consciousness, the ideas that enter the mind through them have a common relation to the feeling of pleasure.

These substrata will also regulate the successive states of consciousness in relation to the objects of intellectual pleasure, and through them, therefore, it is that the mind conceives, either instinctively (as genius), or deductively through knowledge, correct conceptions of those objects; and realizing these conceptions, works matter into artistic forms, harmonizes colour, or combines sounds; which results are perfect accordingly as they approach the model or archetype in the unconscious mind.

The human female, in the perfection of youth and beauty, is to man probably the most beautiful, and the most pleasurable, visual object in creation. Often, doubtless, the artistic feeling of pleasure is associated with the instinctive feeling; but many of my readers will agree with me in the statement that the one is often unalloyed by the other; and that an abstract perception of the beautiful is excited by this example of the artistic perfection of the constructing principle of intelligence. The physiologist can trace visually the formation of that example from the union of sperm-cell and germ-cell, constituting the primordial cell, to its complete evolution at puberty; and he sees nothing more, in any part of the process of formation, than a combination of cells, according to fixed never-varying rules—or, if varying, leading to imperfect results. To him the fundamental form is a hollow spheroid, or ellipsoid, or a combination of such; the fundamental process a constant combination, re-combination, and multiplication of them. Now, the geometrical rules by which these histological elements are finally combined together, or collated, by the unconscious mind into a form of beauty, appear to have been determined by Mr. Hay, of Edinburgh, who has been sedulously labouring for many years past to elaborate the true principles of beauty in formative and decorative art, just as the geometrical rules by which the bee constructs its hexagonal cells have been determined by Maclaurin. These rules are based on a law of harmonic ratio, "identical," Mr. Hay remarks, "with that by which, through the organs of hearing, the mind is æsthetically impressed with one of the most refined and delightful emotions which mere sensation is capable of exciting, and on which are necessarily based the fundamental principles of musical composition." Mr. Hay lays down, as his first position, that the eye is influenced in its estimation of spaces by a simplicity of proportion, similar to that which guides the ear in its appreciation of sounds; and, as his second, that the eye is guided by direction rather than by distance, just as the ear is guided by number rather than magnitude of vibrations. The basis of his theory is simply this:—"That a figure is pleasing to the eye in the same degree as its fundamental angles bear to each other the same proportions that the vibrations bear to one another in the common chord of music." As to these vibrations, we quote Mr. Hay on the sounds of the monochord.

"This is an instrument consisting of a string of given length stretched between two bridges standing upon a graduated scale. Suppose this string to be stretched

until its tension is such, that when drawn a little to a side, and suddenly let go, it would vibrate at the rate of sixty-four vibrations in a second of time, producing, to a certain distance in the surrounding atmosphere, a series of pulsations of the same frequency. These pulsations will communicate through the ear the musical note literally signified by C, which would, therefore, be the fundamental note of such a string. Now, immediately after the string is thus put into vibratory motion, it spontaneously divides itself into two equal parts, the vibrations of each of which occurring with a double frequency—namely, 128 in a second of time, and consequently producing a note doubly acute in pitch, although much weaker as to intensity or loudness; that it will then, while performing these two series of vibrations, divide itself into three parts, each of which vibrating with the frequency triple that of the whole string—that is, performing 192 vibrations in a second of time, and producing a note corresponding in increase of acuteness, but still less intense than the former; and that this continues to take place in the arithmetical progression of 2, 3, 4, &c. Simultaneous vibrations, agreeably to the same law of progression, which, however, seems to admit of no other primes than the numbers 2, 3, 5, and 7, are easily excited upon any stringed instrument, even by the lightest possible touch. The musical sounds thus naturally produced are called the Harmonics. . . . The musical note produced by the vibratory motion of the whole length of such a string is, as I have already stated, called (C), and is, consequently, the fundamental note or tonic to which all that follow in forming a scale must refer. The note produced by half of the string is the first harmonic, and is called the superior octave to the fundamental note.”*

Now all solid bodies are referred to plane figures upon the retina, and are bounded either by curves or right lines. If by the latter, their outlines are portions of rectilinear figures; if the former, of circles, ellipses, &c. Each rectilinear plane figure has a curvilinear figure that belongs to it—that is, a figure which may be symmetrically inscribed within it; and since every rectilinear figure may be reduced to a triangle, and a triangle is measured by its smallest angle, so also may curvilinear figures be measured by the angles of the rectilinear figure to which they belong. The theory of the pleasing in form being “that the division of space into an exact number of equal parts will æsthetically affect the mind through the medium of the eye, in the same way that the division of the time of vibration in music into an exact number of equal parts æsthetically affects the mind through the medium of the ear,” it follows, that the first step in demonstration is to show the correlation between the fundamental *notes* and fundamental *spaces*. Two straight lines cutting each other—that is to say, a perpendicular and a horizontal line—form at their junction a right angle; and if they be equal in length, and their points be joined by a curved line, equally distant at all points of the curve from the angle of junction, the curve measures one-fourth of a circle, or 90° . The angle (a right angle) is therefore an angle of 90° . This quarter circle corresponds to the monochord in Mr. Hay’s theory, and is divided by him in the same numerical ratio that the vibrating monochord divides itself, as just explained; the result being a series of rectilinear and their corresponding curvilinear figures, measured by the angles thus produced, correlative with the fundamental notes. When the parts or vibrations that constitute a musical sound are multiples of the fundamental number by 2, 4, 8, &c., they are called *tonics*; by 3, 6, 12, &c., *dominants*; by 5, 10, 20, &c., *mediants*; by 7, 14, 28, &c., *sub-tonics*. So in plane figures. Divisions by 2, 4, &c., give tonic angles; by 3, 6, &c., dominant angles; by 5, 10, &c., mediant angles; by 7, 14, &c., angles of the seventh degree, or fundamental discord. These angles may be also represented by figures, thus: 90° being taken as 1, an angle of 45° is an angle of $\frac{1}{2}$; 30° of $\frac{1}{3}$; $22^\circ 30'$ of $\frac{1}{4}$; 18° of $\frac{1}{5}$, and so on. There is, therefore, a scale of harmonical angles exactly corresponding to a scale of harmonical notes; this Mr. Hay

* “The Geometric Beauty of the Human Figure Defined,” &c., 4to, pp. 6, 7. 1851.

gives.* The tonic, dominant, and mediant notes produce, when combined, the most beautiful harmony; correlatively, the geometrical figures and forms of which the tonic, the dominant, and the mediant angles are the primary elements, are also the most beautiful of their kind. These views Mr. Hay applies to the Parthenon, to the leaves of trees, to flowers, and to the human form. Illustrations of these are given in the last-quoted work. His views have also reference to the identity of the laws of intellectual pleasure derived through the senses, quoting as to this principle a hypothesis of Sir Isaac Newton, thus expressed: "I am inclined to believe some general laws of the Creator prevailed with respect to the agreeable or displeasing of all our senses; at least, the supposition does not derogate from the wisdom or power of God, and seems highly consonant to the simplicity of the macrocosm in general."

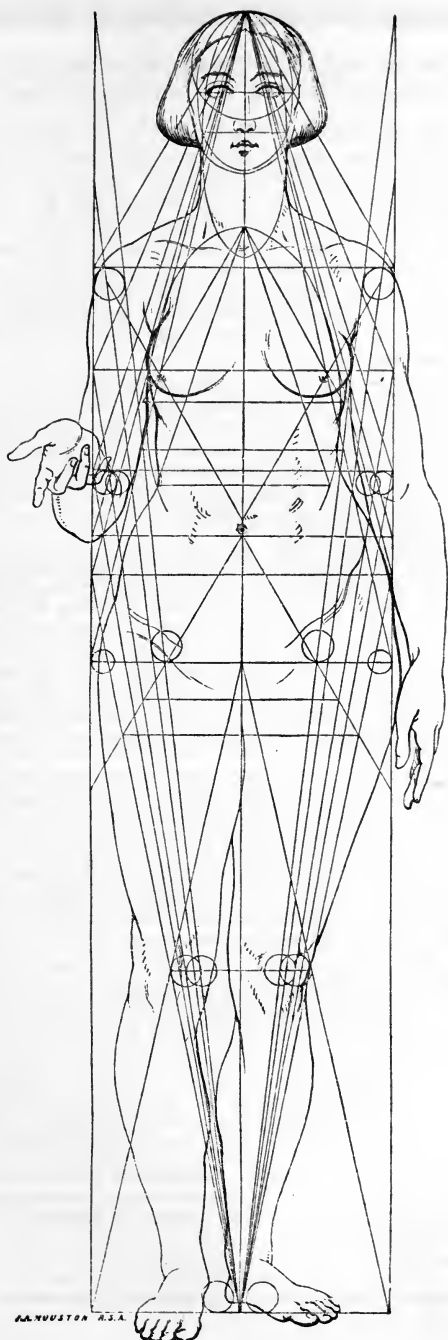
To construct the human female form in perfect proportion, Mr. Hay takes the first eleven harmonic angles as they arise consecutively from a division of the right angle, which he adopts as the fundamental angle, and combines them geometrically. First he lets fall a perpendicular line, representing the height of the figure to be constructed, and from this line draws his angles, according to a system only to be understood by a reference to his treatises. The curves of the figure are portions of circles and ellipses, whose angles of inclination are simply those of $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$. The following is Mr. Hay's summary:

"1st. That on a given line the figure is developed as to its principal points entirely by lines drawn either from the extremities of this line, or from some obvious and determined localities. 2nd. That the angles which these lines make with the given line, are all simple multiples or sub-multiples of some given fundamental angle, or bear to it a proportion admissible under the most simple relations, such as those which constitute the scale of music. 3rd. That the contour may be resolved into a series of ellipses of the same simple angles; and fourth that these ellipses like the lines, are inclined to the first given line by angles which are simple multiples or sub-multiples of the given fundamental angle. . . . Thus there is a perfect harmony of combination in its proportions, associated with as perfect a harmony of succession in its beautifully undulated outline, the curves of which rise and fall in ever varying degree, and melt harmoniously into one another like the notes of a pleasing melody. When, therefore, we reflect that the scientific investigations of the anatomist have proved, that in the fitness of its parts the construction of the human frame exhibits the closest approximation in nature to a perfect development of mechanical science, and that similar investigations of the physiologist have proved that the processes by which it is sustained in vital energy exhibit the closest approximation in nature to a perfect development of chemical science, it cannot in any way be surprising to find that, in like manner, and agreeably to a definite and acknowledged law, the beauty of its form discloses the nearest approximation in nature to a perfect development of the science of aesthetics."†

Through Mr. Hay's kindness I am enabled to give a woodcut, with the angles upon it, from a drawing taken by Mr. Houston, R.S.A., of a Scottish female employed in the Royal Scottish Life Academy as a model. All the points of this figure correspond, except the hands, which are a little larger (probably from hard work), and the waist, which has evidently been compressed by stays, with the theoretical figure. The real variation is in the national high cheek-bones and broad Scottish face of the living model. Professors Kelland and Goodsir also assisted Mr. Hay in carefully measuring six living models, the classic statue known as the Medicean Venus, and another as the Venus of Melos. The results corresponded so closely with the theory as to leave

* "The Orthographic Beauty of the Parthenon," p. 21; also, "The Geometric Beauty of the Human Figure Defined; to which is prefixed a System of Æsthetic Proportion." Appendix.

† "The Natural Principles of Beauty as Developed in the Human Figure," by D. R. Hay, F.R.S.E., p. 23.



no doubt of its accuracy as to the living model, and to render it probable that a similar system constituted the basis of artistic education among the ancient Greeks.*

Fitness, strength, and beauty, are combined in the constructions of the unconsciously constructing principle of intelligence; these are the objects to be aimed at in architectural and the other formative arts. In one of his recent works† Mr. Hay demonstrates, by numerous measurements, that one of the most beautiful structures of antiquity, the Parthenon at Athens, was constructed on geometrical harmonies identical with those according to which the perfect human figure is developed or formed. The right angle (90°) is the fundamental tonic; taking this as the key-note, Mr. Hay theoretically re-constructs that grand architectural harmony throughout all its details; and then shows that the actual measurements correspond sufficiently near to the theoretical to demonstrate their identity.

In the application of geometrical ratio to architecture, Mr. Hay has had numerous predecessors; it is in selecting *angular* proportion as the basis of his harmonic system, instead of linear, and in applying his principles to curvilinear as well as rectilinear figures (especially the composite ellipse), that he differs from them. Nevertheless, the geometrical harmonies derived from *linear* proportions have an extensive application, especially to Gothic architecture. In these the *three primary forms*—the equilateral triangle, the square, and the pentagon—are fundamental figures.

Mr. Griffith (who has illustrated this theory) terms the governing figure in his system of numerical rectilinear ratio, the *kleis* (κλεις, *clavis*, key), but he draws his analogies from chromatics rather than acoustics, and makes his three primary forms analogous to the three primary colours—yellow, red, and blue. The system not only evolves all the ornamental details as well as the ground-plan, but also the greatest strength and elevation; for the same geometrical lines which dictate the latter “indicate the direction of all the thrusts or forces, and their sundry workings.”‡ The ratios in the rectilinear system are the same as in the angular; and curvilinear figures are deducible from the rectilinear.

In another work, published in 1845, entitled “The Natural System of Architecture,” in which the theory is applied to both Greek and Gothic structures, Mr. Griffith examines and delineates the geometrical proportions of the following Greek temples (amongst others), the Parthenon, Erechtheion, the Temple of Bacchus at Teos, of Themis at Rhamnus, and of Theseus. Amongst the Gothic structures are York and five other English cathedrals; and the Temple Church and King’s College Chapel, amongst minor examples. Writers since Griffith have also taken up this subject, but on the same principles. We may infer, therefore, that the changes in the vesicular neurine, occurring during consciousness, have a definite relation to geometry and dynamics.

The views just advanced apply exclusively to the absolutely beautiful and true. Pleasure may be derived, however, from that which is relatively beautiful and true; and, indeed, this is the most common source of our pleasure. All special substrata, acquired either by inheritance or by the external relations of the individual, do modify the states of consciousness by the changes going on within them, when the appropriate stimuli reach them. To the former belong secret, “occult,” or mysterious sympathies; to the latter the pleasures

* In another and earlier work (1849), entitled “On the Science of those Proportions by which the Human Head and Countenance, as represented in Works of Ancient Greek Art, are distinguished from those of Ordinary Nature,” 4to, Mr. Hay treats fully of this subject.

† “The Orthographic Beauty of the Parthenon referred to a Law of Nature.” 1853.

‡ “Ancient Gothic Churches, their Proportions and Chromatics.” By William P. Griffith, Architect. Part II. p. 21.

of memory. Thus it is, that in a foreign land to hear the familiar language of home is a delight, or even to experience any impressions associated with pleasurable feelings felt at home. It is in confounding these different sources of pleasure, indeed, that the greatest obstacle to a true system of æsthetics and a sound philosophy of morals exists.

Having thus shown the instinctive *nature* and *origin* of our intellectual faculties, I shall now illustrate their instinctive *action*. It has been seen that acquired knowledge is no essential part of instinct generally, neither is it of these faculties when working instinctively. That which is necessary is a full development of the psychical substrata appropriate to each, or phrenologically the cerebral "organ." Persons endowed with these, and who have put them into action so as to evolve results, are known by the term *Genius*. Functional *activity* is, however, necessary; that is to say, in all artistic conceptions there must be the power to *represent* either to the eye or the ear. Most men who observe the working of their own minds, are cognizant of a power to conceive far beyond a power to execute; whether it be to clothe their ideas in appropriate language, with due rhythmical cadence (of which poetry is but one form), or in appropriate combinations of musical sounds, or in the visual music and rhythm of sculpture and architecture. Often the power to execute is greater than the power to conceive; thus, persons who know not a musical note, will play on the piano any tune which they have heard once or twice. Mozart is an example of true musical genius. When only four years old he began to write music in strict accordance with the rules of musical composition, although he had not been instructed in them. In after life he wrote music because, to adopt his own expression, he could not help it. So it was with an eminent English poet:

"I lisped in numbers, for the numbers came."

Instances of this kind could be multiplied to an almost indefinite extent.*

An illustration of the instinctive working of the *numerical* faculty may be added, to show that the doctrine is generally applicable. Mr. Roby, a banker at Rochdale, played, sang, composed, and was an amateur painter. His most developed intellectual instinct however, was his powers of calculation, in which he was superior to Bidder, perhaps the most wonderful calculator this country ever produced. His widow states in his published "*Remains*," edited by her:

"If a double column, twenty figures in each row, or a cube of six, were placed before him, he would tell the sum as soon as his eye could read the figures. He arrived at the result without going through the ordinary process; he saw it at a glance. If, as was rarely the case, owing to a passing fit of dulness, or a momentary distraction of thought, he failed to see the sum at once, he was rather slow than otherwise in doing it by the ordinary mode."

* Much knowledge might be gained from a careful observation of the instinctive working of these faculties. The following is an interesting fact taken in connexion with the preceding statements; it is from the "*Diary of Moore*," the poet (edited by Lord J. Russell, vol. ii. p. 237): "Dined at Power's, to meet Bishop, the composer, who is one of the very few men of musical genius England can boast of at present. . . . The omission of the seventh and fourth, he says, is the characteristic of natural music; has often found, when he has been wandering wildly through the mountains of Wales, and has sung away without thinking *what* he sang, that he has invariably detected himself omitting the seventh and fourth." The following entry is also interesting, at p. 341: "Dined with Power, to meet Bishop —. He mentioned a good story to prove how a musician's ear requires the extreme seventh to be resolved. Sebastian Bach, one morning getting out of bed for some purpose, ran his fingers over the keys of the piano as he passed, but when he returned to bed found he could not sleep. . . . At length he recollected that the last chord he struck was that of the seventh; he got up again, resolved it, and then went to bed and slept as comfortably as he could desire."

The preceding series of arguments and illustrations have brought the subject to the point from whence it was commenced—namely, the unconscious or reflex action of the cerebrum. Perhaps enough has been stated to establish these two prime truths,—1. That the unconsciously working principle of intelligence manifested in the construction and instincts of vegetables and of animals, is identical with the unconsciously working principle of intelligence manifested in the construction and functions of the human cerebrum; 2. That the human mind is none other than this unconscious principle of intelligence individualized, become cognizant thereby of its own workings in the cerebrum, and deriving its ideas from its own constructive or material changes in the organ of mind. To demonstrate more clearly the unity of origin and action of the two forms of intelligence, and the application of the doctrine to practical uses, I will now add some further illustrations, taking the intellectual instincts as a starting-point.

The appreciation of the Beautiful, in connexion with the pleasures of sense, is a familiar fact to the moralist and the philosopher. In man it is first felt rightly with the complete evolution of the system, and when he is become capable of reproducing the species: just as, at the same stage of evolution, his beauty is most perfect. No idea of the unconscious principle of intelligence is more universal than this. In many of the phanerogamous plants the period of formation of the primordial cell (or union of sperm-cell and germ-cell—fertilization of the ovum) is marked by a display of grace of form and beauty of colour in the appendages to the sexual organs, which it is man's highest ambition to rival successfully. These appendages are formed out of what are the analogues of the male organs. In the insect-world, the brief period of fertilization is also the period of perfect development; in some of these, as the *Lepidoptera*, there is a gorgeous decoration of the animal, and more particularly in the male. In fishes, birds, and mammals, puberty is also characterized by the development of ornaments more or less striking, but more especially on the male; scales brightly coloured, gorgeous feathers (as in humming-birds, and the Gallinacæ), and horns, manes, beards, are of this kind. In the human female, the hair, the mammæ, and the subcutaneous fat, are undoubtedly analogous structures. The conscious mind displays in man a similar law of action; the gay attire of the lover, and the glories of bridal dress and decoration, are but evolutions of the same great idea of the unconscious mind.

While thus in creation the outward form is æsthetically a unity, so also are minor sources of sensation. Many animals are attracted by *scents* developed during reproductive activity—insects, fishes, and mammals, not excepting man; it is during this period that flowering plants give off their sweets. *Sounds*, of a more or less musical character, are emitted by insects, birds, and mammals, during the same period—perhaps almost exclusively by the males; in this respect the analogy (as to plants and the lower animal forms) is defective. In man, the taste for poetry, music, sculpture, and the decorative arts, is only fully developed with the evolution of the reproductive organs, while it is exalted as to one of these by their special activity. The ballad "to his mistress' eye-brow" of the lover, is the exact analogue of the song of the cicada, or of the male song-bird.

I have given a practical application to these views in an attempt to investigate the nature and origin of hysterical affections, and to this work I would refer the reader.* If the instincts of man, and vegetables, and animals, be collated in reference to the continuance of the species, they will be found to be inseparably connected with every kind of both æsthetic and constructive art, in every form of organism.

Ordinary dreaming, somnambulism, clairvoyance, delirium of every sort, in-

* "A Treatise on the Nervous Diseases of Women." Longmans and Co.

sanity, and other forms of disordered cerebral action, are important changes in the states of the consciousness in reference to the representative faculty. There can be little doubt that these changes have their correlative changes in the vesicular neurine itself, although the demonstration is not easy. In the action of alcohol, chloroform, opium, Indian hemp, &c., on the blood, and, through the blood, on the cerebral tissue, we have, however, an undeniable proof that there are instances in which these changes in the consciousness *do* depend upon changes in the cells of the vesicular neurine, for the invariable connexion of antecedent and consequent is most clearly made out in reference to these. It is a doctrine generally entertained, that narcotic poisons have each a special action upon special portions of the encephalon; but I think there is considerable doubt to what extent, at least, this should be admitted. The difference may be rather in the mode of action than the locality selected; for it by no means follows that these poisons must necessarily affect the vesicular neurine so as to alter the states of the consciousness. On the contrary, it is exceedingly probable (if the proposition I have advanced be granted—namely, that the function of the nerve-cells is only the result of a specialization and evolution of a more general function inherent in all cells), that the latter participate with the former in the changes which the so-called narcotic poisons induce. That this is so with some of them is undeniable, and I will proceed to show this with reference to opium, hoping at the same time to demonstrate the *principles* (in opposition to our empirical knowledge) by which the administration of the drug should be regulated.

The first result of the action of opium on the tissues is to exalt the feeling of corporeal well-being; it is, therefore, congruous with the normal action of those tissues. Its power of actually sustaining the vital powers is well illustrated by the use made of it by messengers and others in the East, both for themselves and their horses, when they have to undergo prolonged labour with little sustenance. Acting upon the organs of self-consciousness and thought, it again exalts the feeling of pleasure in connexion with their action and the states of consciousness arising therefrom. To the wounded spirit it is described, by one who tried it largely, “as an assuaging balm;” and as building out of the fantastic imagery of the brain, “cities and temples beyond the art of Phidias or Praxiteles—beyond the splendour of Babylon and Hekatompylos.” Now this being the action of opium upon tissues wherein consciousness plays, we may infer that it has an analogous action on tissues apart therefrom; and this experience shows to be the case, for there is perhaps no remedy which more facilitates a return to normal action in those tissues when the seat of sloughing wounds, or when the vital reaction is below *par*, than opium. So, also, when the nutrition or vital action of the vesicular neurine is imperfect from like causes, as in asthenic neuralgia, the various forms of melancholia (especially those connected with excessive use or action of the organ), and the asthenic forms of delirium and delirious mania, opium is the most certain medicinal agent. Those who have studied these varied uses of opium empirically, will recognise the justice of these statements as to its widely-different therapeutic applications, and will readily understand that the common link which binds them together in one therapeutic category, is the unity of function of cells in relation to the predetermined arrangements of the unconscious mind. The irritability of a chronically inflamed mucous surface, and the irritability of a nerve or sensorial centre, are not essentially different pathologically; on each, opium acts medicinally in a way also not essentially different. I would call special attention to this point in my system, as one of exceeding value in therapeutics, for if that system be well-founded, we can interpret the so-called vital phenomena by those which involve consciousness, and *vice versâ*; for the latter being nothing more than the workings of the unconscious soul reaching the consciousness through a special apparatus evolved for the purpose, and the

works of the unconscious soul not reaching the consciousness, being vital phenomena, the one can be substituted for the other in our inquiries, so far as the bio-chemical changes in the tissues are involved.

I had intended to have illustrated the nature of the Will (a state of self-consciousness) by an application of these views to the phenomena of motion in organisms, whether animal or vegetable; this must form a subject for further and separate inquiry. As to the doctrines advanced, I may be permitted to say, that they really constitute only a small portion of a general system of mental philosophy, and are therefore of necessity presented in a fragmentary shape. In thus opening out a new and altogether uninvestigated series of related phenomena, I think it right to make some remarks which may be of use in explaining my views and guiding the thinker and observer.

I have constantly made use of the term unconscious principle of intelligence or *mind*. By that term I mean simply to designate that principle of intelligence which is manifested in *all* the phenomena of the universe, so far as they are known, and whether cosmic or organic, in virtue of which all things tend to Good. It is a principle, according to my views, as universally operative, as devoid of personality, and as certain and definite in its laws of action as the force of gravity, and is the primary and essential element of the conscious mind. I term it the *unconscious* mind because to us it so appears to be in its operation in organisms; for although there can be no doubt whatever that it proceeds from the great creative Intelligence, yet the laws of the inductive philosophy forbid us to investigate its relations to the Deity, since these are clearly beyond the reach of philosophical observation and experiment. Like the force of gravity, it is a property of matter, and like it, probably dependent upon an immediate volition of the Deity. Speculations as to its nature and relations have been current in every age, and need not be multiplied now. It has been conceived to be God himself; a doctrine which has constituted the foundation of Pantheistic and analogous systems of theology; or under the term Nature, it has occupied the place of the Deity in Atheistic systems; or in Deistic systems, has been viewed as a special moral agent. In Cosmogony, it has been considered as a *hylœic* principle animating the world, as if the latter were an animal; or, in relation to natural history and physiology, has been considered as the *anima*, plastic nature (Cudworth), the Archæus, the vital principle, the *vis nervosa*, &c. All these speculations I wish to avoid, preferring to investigate its laws of action through its phenomena: these are twofold: the changes it operates in matter, in reference to the ends it has in view, as manifested by phenomena; and the changes in the states of the consciousness, consequent on those material changes. When these laws have been determined and settled, in part at least, we shall be in a position to determine more satisfactorily than hitherto, the relations of the self-conscious mind to organization, the nature of Truth, and the limits of moral responsibility; or, in other words, to establish psychology, metaphysics, and moral philosophy on a more definite basis.

I have repeatedly used the term *psychical substrata*. By this I do not mean to imply a certain material arrangement of cells or their elements only, but such an arrangement that a fixed order of successional changes, or plan of action, may be impressed upon them. Thus each primordial or embryonic cell has its psychical substrata, in virtue of which there is a continuous series of successional changes in a fixed, predetermined order, and according to a fixed plan. So, also, in those cell-masses (or vesicular neurine) appropriate to special ideas, there are psychical substrata, in virtue of which there is a constant construction of new cells, corresponding to those new states of the consciousness comprised under the general term *development of ideas*, the ideas being developed and the new cells constructed according to a fixed and predetermined law of development. The substrata have *potential* pro-

perties—that is to say, they contain the germs of further and indefinite series of future changes, as well as properties in actual use in relation to the external world.

ON THE POLICY OF MAINTAINING THE LIMITS AT PRESENT IMPOSED BY LAW ON THE CRIMINAL RESPONSIBILITY OF MADMEN.

BY FITZJAMES STEPHEN, ESQ., LL.B.,

Of the Inner Temple.

(Read before the "Juridical Society," 4th June, 1855.)

It is not often that we have an opportunity of laying before our readers a *strictly legal view* of the subject of Criminal Insanity from the pen of an acute and accomplished writer. We gladly avail ourselves of an opportunity of reprinting from Part I. of the papers of the "JURIDICAL SOCIETY" Mr. Stephen's valuable essay. He has considered the subject in the spirit of a jurist, a scholar, philosopher, and a gentleman: we are bound to confess thus much, whilst we admit that we dissent from many of the propositions he has advanced. We reserve for another opportunity an expression of our critical objections to the views propounded by this writer. His essay will be read with great pleasure by all interested in this important subject.

"It is about twelve years since the public attention was called to the consideration of this subject by the murder of Mr. Drummond by Daniel McNaughten. An impression prevailed at that period that the impunity accorded to the insane by the practice, if not by the principles, of the law, had been carried further than was consistent with the safety of society. In accordance with this policy, the House of Lords referred several questions to the Judges, in answer to which they delivered opinions which have since that time regulated the proceedings of Courts of Law in the class of cases to which they related.

"The consistency and the policy of the course adopted by the law has been lately censured with great force by some of the most eminent members of the medical profession, and in one work, of the medical merits of which I do not pretend to judge, though no one can be blind to its deep literary and philosophical interest,—I allude to the Lettsomian Lectures, lately published by Dr. Forbes Winslow,—the principles and practice of the law upon this subject are spoken of in terms which would no doubt be well deserved if the learned author had not, in my judgment at least, fallen into some confusion, not indeed as to the main doctrine of the law, but as to the course and objects of its procedure.

"Upon the question as to what the law is, there can fortunately be no doubt. I will read the question proposed by the House of Lords, and the unanimous answer of fourteen of the Judges upon the occasion to which I have referred.

* "Q. What are the proper questions to be submitted to the jury, when a person alleged to be afflicted with insane delusions respecting one or more par-

* "1 Car. and Kir. 134, 135."

ticular subjects, or persons, is charged with the commission of a crime (murder, for example), and insanity is set up as a defence?"

"In what terms ought the question to be left to the jury as to the prisoner's state of mind at the time when the act was done?"

"A. The jury ought to be told, in all cases, that every man is presumed to be sane, and to possess a sufficient degree of reason to be responsible for his crimes, until the contrary is proved to their satisfaction; and that, to establish a defence on the ground of insanity, it must be clearly proved, that, at the time of the committing of the act, the party accused was labouring under such a defect of reason from disease of the mind, as not to know the nature and quality of the act he was doing, or if he did know it, that he did not know he was doing what was wrong. The mode of putting the question to the jury on these occasions has generally been, whether the accused, at the time of doing the act, knew the difference between right and wrong; which mode, though scarcely if ever leading to any mistake with the jury, is not we conceive so accurate, when put generally and in the abstract, as when put with respect to the very act with which he is charged. If the question were to be put as to the knowledge of the accused solely and exclusively with reference to the law of the land, it might tend to confound the jury, by inducing them to believe that an actual knowledge of the law of the land was essential in order to lead to a conviction; whereas the law is administered upon the principle that every one must be taken conclusively to know it, without proof that he does know it. If the accused was conscious that the act was one which he ought not to do, and if that act was at the same time contrary to the law of the land, he is punishable; and the usual course therefore has been to leave the question to the jury, whether the party accused had a sufficient degree of reason to know that he was doing an act that was wrong; and this course we think is correct, accompanied with such observations and explanations as the circumstances of each particular case may require."

"The objections made to the law so stated by Dr. F. Winslow, Dr. Richard, Dr. Ray, and Dr. Taylor, are, as I understand them,

"1st. That the law is guilty of inconsistency in theoretically excusing madmen from responsibility for their crimes, whilst it adopts a practical 'test of insanity' which includes them.

"2nd. That it propounds for the consideration of the jury questions involving metaphysical knowledge, couched in vague and indefinite language, and applying to a subject-matter in itself uncertain.

"In opposition to these objections, I propose, in the present paper, to explain the reasons which have led me to the conviction that the course adopted by the law is logically consistent with the rest of its proceedings; that the questions which it raises for the jury are questions proper to be submitted to their consideration, and which it is within the power of men of ordinary intelligence to solve; and that it would be impolitic to adopt any course of proceeding which would enlarge the immunities at present extended to madmen.

"I think that the unfavourable opinion entertained by physicians of the administration of the law arises principally from a misconception of the exact nature of its inquiries; for I find in several books of Medical Jurisprudence such phrases as 'plea of insanity,' and 'legal test of insanity.' I find one writer of the greatest eminence speaking of the 'rule of law, that no man is responsible, like a sane person, for an act committed by him while in a state of insanity.*" In fact, with the exception of Dr. Mayo, and perhaps of Dr. Ray, the medical writers with whose books I can profess acquaintance, seem to look upon the insanity of the prisoner as the thing to be proved, and his consciousness of right and wrong as its established legal criterion.

"I propose, then, to consider how far insanity is a defence for alleged crime.

* "Taylor, Med. Jour. 790."

and why evidence of its existence in a supposed criminal is admissible in a Court of Justice.

"I do not think that the vital distinction in this matter has been anywhere so clearly pointed out as in the separate opinion delivered by Mr. Justice *Maule*, in answer to the questions of the Judges, on the occasion to which I have referred.

"*'What,'* it was asked, *'are the proper questions to be submitted to the jury when a person is charged with a crime and insanity set up as a defence?'*

"*Maule, J.*, answered—*'The questions necessarily to be submitted to the jury are those questions of fact which are raised on the record. In a criminal trial the question commonly is whether the accused be guilty or not guilty?'* The jury, that is, are to inquire into nothing which is not in issue. They are impanelled to decide certain questions of fact in the negative or affirmative, and nothing is admissible in evidence unless it tends to enable them to answer these questions, or some of them. The questions are raised by prosecutor and the prisoner. The prosecutor affirming certain facts respecting the prisoner, and the prisoner either confessing or denying them, or alleging some reason why he should neither confess nor deny. Such denial, confession, or allegation, is the prisoner's plea, and if it raises a question of fact, asserted on one side and denied on the other, the jury are to decide it. First, then, madness is not a plea. The prisoner does not plead it as he would plead a pardon under the Great Seal, a former acquittal or conviction, or as he would plead to the jurisdiction. He gives it in evidence under the plea of Not Guilty. So that the very form of the proceedings implies, that, in order to entitle himself to an acquittal, the prisoner must not only show that he is mad, but that he is thereby not guilty. In more technical language his madness must be such as to enable him to traverse some one or more of the material averments of the indictment.

"When the defence rests upon proof of insanity, the fact of the killing (for the sake of simplicity I will confine my illustrations to a single crime) is generally admitted, so that the only material averments which remain to be traversed are those which charge will and malice.

* "*'Malice,'* or *'maliciously,'* says Foster, *'mean an action flowing from a wicked and corrupt motive, a thing done malo animo malâ conscientia?'* Now if a man has either no motives at all, or no power of discerning what motives are wicked and what not—in more popular language, if he cannot discern good from evil—he cannot be said to act maliciously in the legal sense of the word; and if he can show that by reason of any disease he is wholly unable, or that by reason of certain provocations defined by law, as, for example, the provocation of blows, he was temporarily unable to distinguish between good and evil, he has rebutted the presumption of malice. It is only in so far as it tends to rebut either this presumption, or that of will, that the madness of the prisoner is material. It is altogether a mistake to suppose that the point at issue is his sanity or insanity. The jury are not impanelled to try whether or not the prisoner is mad, but whether or not he is a wilful and malicious murderer. Except in so far as the first question bears upon the second it is as irrelevant as any indifferent fact, as the place of the prisoner's birth, or the names of his parents. When, therefore, in such cases the judge directs the jury to consider whether the prisoner was in a state of mind in which he was capable of distinguishing between good and evil, he is not proposing to them a test by which they may be able to determine the question whether the prisoner was mad when the act was done, he is simply directing their attention to what in the course which the inquiry has taken is the only material issue—the issue raised by the prisoner's traverse of the malice charged in the indictment.

* *'Foster, Crim. Law, 256.'*

"Stripped of all technicalities whatever, the transaction may be represented thus:—the prosecutor says, I charge this man with having voluntarily and wickedly killed A.B. The prisoner says, I did kill him, but not voluntarily or wickedly—for I was compelled by the involuntary action of my muscles, and exercised no volition in the matter; or, I was prevented by disease from distinguishing good from evil, and therefore could not act wickedly. The whole course of authority upon this subject agrees with the explanation of the law which I have offered.

"Lord Hale (1 H. P. C. 14) says, that there are two qualities which make men subject to moral government—will, and understanding. That where there is no will there is no transgression, that where there is no understanding there is no will. That therefore where there is no understanding there is no transgression. Again (p. 32), 'The trial of the incapacity of a party indicted for a capital offence is upon his plea of not guilty upon his arraignment;' and (p. 36), 'If a person during his insanity commit homicide or petit treason and recover his understanding, and being indicted and arraigned for the same pleads not guilty, he ought to be acquitted;' and then follows the reason: 'for by reason of his incapacity he cannot act *felleo animo*,'—feloniously.

"In Hawkins' Pleas of the Crown, in Sir W. Russell's work upon Crimes, and in the fourth volume of Blackstone's Commentaries, crimes are considered as involving two elements,—an unlawful act, and an unlawful will; and a person incapable of having an unlawful will is by these authors described as being *non compos mentis*. This phrase is by no means applied to those only whom we call mad. It is applied by all the authors I have mentioned to infants, lunatics, idiots, and drunkards—though as to these last there are various distinctions immaterial to my present purpose. In fact, in criminal law the phrase *non compos mentis* is used as an equivalent for unable to distinguish good and evil, and is so applied by Hawkins, who says, 'Those who are under a natural disability of distinguishing between good and evil, as infants under the age of discretion, idiots, and lunatics, are not punishable by any criminal jurisdiction whatever;' and in *Reg. v. Oxford*, 9 C. and P. 547, Lord Denman said, 'on the part of the defence it was contended that the prisoner at the bar was *non compos mentis*; that is, as has been said, unable to distinguish right from wrong.'

"I have met with no authority for the proposition that madness is any excuse whatever for crime, except in so far as it takes those who suffer under it out of the definitions laid down, quite irrespectively of the question of madness, for the purpose of determining what constitutes criminality. The reported cases upon this subject are as clear as the text writers.

"The law is thus laid down by Mr. J. Tracy, in the case of *Edward Arnold*, tried at Kingston in 1724, for shooting at Lord Onslow (16 St. Trials, 764): 'That this man shot, and that wilfully, is proved; but whether maliciously, that is the thing—that is the question. Whether this man hath the use of his reason and sense. If he was under the visitation of God, and could not distinguish between good and evil, and did not know what he did, though he committed the greatest offence, yet he could be guilty of no offence against any law whatsoever; for guilt arises from the mind, and the wicked will and intention of man, and if a man be deprived of his reason, and consequently of his intention, he cannot be guilty.'

"The same principle was acted upon in the case of *Lord Ferrers*, 19 St. Tr. 886; in the case of *Sir A. Kinloch*, 28 St. Tr. 891; and in the case of *Hanfield*, 27 St. Tr. 1282 (as I shall show more fully hereafter); in the case of *Bellingham*; and in that of *Oxford*. In the great case of *R. v. McNaughten* (1 Townsend's St. Tr. 314), a different doctrine was supposed, I shall contend hereafter erroneously, to have received judicial sanction.

"It is upon these grounds that I maintain that it is not correct to charge the

Judges with having laid down a fallacious test of insanity, or with inconsistency in excusing madmen on the one hand, whilst on the other they apply a criterion bringing most madmen within the law. They have laid down no test of madness whatever. They have laid down tests of responsibility, or, more strictly speaking, have specified facts from which, when juries have found them, Judges are to infer malice; but it is no part of their duty to say how far particular diseases affect the relation of persons to such tests. 'That,' in the language of *Maule, J.*, 'is a question not of law, but of physiology, and one not of that obvious nature to be inferred without proof.'

"It may, however, be contended, that however logical and self-consistent the course adopted by the law may be, the question which it proposes for the consideration of the jury is one which is not capable of being clearly asked or clearly answered. The grounds of this opinion seem to be, that the question whether a man knew that he was doing wrong, is a question which cannot be answered unless we are prepared with a definition of wrong; and that whereas the word wrong implies a deviation from some rule, it is impossible to say what that rule is.

"My answer to this objection is, that the difficulty is apparent and not real, for questions involving equal difficulties are daily submitted to juries, and it is not denied that they are rightly submitted to them.

"The question whether an act is wilful is at least as closely connected with the question of free will, as the question whether an act is malicious is connected with the question of the source and nature of moral obligations; but the question whether or not an act was wilful enters more or less into every criminal trial.

"Indeed, the specific question whether an act was malicious arises in other cases besides that of crimes committed by the insane. It is, for example, the question upon which the distinction between murder and manslaughter turns.

"The question of consent in cases of rape raises for the consideration of the jury a question at least as nicely balanced, and as nearly allied to the deepest metaphysical problems, as any connected with the freedom of the will, or the distinction between good and evil.

"Since the fact is that juries are constantly in the habit of solving questions apparently insoluble, it is obvious that the supposed difficulty is not a real one. I apprehend that a man may know that a certain act is wrong without being in any degree acquainted with any system of morals, and that others in a similar state of ignorance may infer from his conduct that he did know it. For it is one thing to know a fact, and another to know the reasons why the fact is so. The use of the words right and wrong preceded metaphysics, and extends into classes of society which know nothing of them. In fact, all metaphysics spring from language which is at first descriptive merely, and continues to be so in ordinary usage long after it has been made definite for the purposes of science. It may be extremely difficult to give a definition of wrong, but nothing is more easy than to describe some of the more glaring characteristics of the acts to which men affix that name. There may be wrong actions which are not universally disapproved of, or visited by the punishment of the law, or directly subversive of the security of society; but there can be no difficulty in saying that an action which fulfils all those conditions is a wrong action according to the common use of language, and that a man who knowingly does such an act, being aware of the circumstances surrounding it and able to judge of them, knows that he is doing wrong. Now it is only upon cases which unite in themselves such characteristics as these that juries are called upon to determine. The word 'wrong' is a word of description, and it is the peculiar province of a jury to determine whether the facts proved would in the ordinary use of language be considered as falling within that popular and descriptive language which the nature of the case constantly requires the law to use.

Thus, for example, whether a crop has been left on the ground for a reasonable time for a certain purpose; whether an offer to transfer shares was made within a reasonable time; whether an insured ship has sailed within a reasonable time—these are questions for a jury. So the questions of reasonable skill and due diligence are for the jury; and though that of probable cause is by a strange anomaly for the Judge, I think that it may be stated, as a general rule, that matter of description is a question for the jury and matter of definition for the Court.

“Upon these grounds I am of opinion, that, when a jury is asked whether a man knew that in doing a particular act he was doing wrong, they are not asked a question beyond the reach of very ordinary capacity.

“I think, therefore, that the course pursued by the law upon this subject is logical and self-consistent, and that the questions raised for the consideration of the jury are within their province.

“Such being the state of the case, would it be politic to alter it, either by erecting insanity into a plea in the strict sense of the word, or by providing that proof either of madness generally, or of the existence of some special insane delusion, should *per se* entitle the accused to a verdict of not guilty?

“The proposal to exempt madmen generally from punishment, is in effect a proposal to exempt all persons afflicted with a particular disease. It is, in fact, a proposal to enact in England the 64th article of the French Code: ‘Il n’y a ni crime ni délit lorsque le prévenu était en état de démence au temps de l’action.’ Now, as medical knowledge advances, the connexion of different forms of disease, which at first were not supposed to be connected, is by degrees laid open. Dr. Prichard, for example, and others, have discovered, as they say,—and I am not so presumptuous as to refuse for an instant to submit to the correctness of their observation,—that there is a sufficient analogy between those diseases of the brain which produce mania, and those which produce extreme imprudence and immorality of conduct, conjoined or not with a greater or less degree of intellectual aberration, to justify them in calling them both by the name of insanity, and describing the one as intellectual and the other as moral. So, too, a species of insanity called instinctive or impulsive, has been discovered, I believe, within the last thirty or forty years; and the disease which Lord Hale called partial insanity, and modern physicians call monomania, has been subdivided into several classes; amongst others, phomania or homicidal madness, pyromania or arson madness, and kleptomania or theft madness. I do not mean in the least degree to deny the importance or the accuracy of these investigations. I will admit all that any physician can contend for, namely, that there are diseases of the brain, or of the nerves, or of some other part of the system, which predispose people in a greater or less degree to act in the manner described. What I contend is, that it would be inexpedient to allow the mere fact that such persons are the subjects of a disease to exempt them at once and entirely from punishment. I admit that there are some madmen whose madness destroys their responsibility. I admit that the persons whom Dr. Prichard describes as ‘morally insane’ are (for anything I know to the contrary) properly so designated; what I say is, that it would be most unwise to commit society at large to the principle that any disease now discovered, or hereafter to be discovered, which bears such an analogy to that kind and degree of madness which produces irresponsibility as to be called by the same name, is of itself a ground for exempting persons suffering under it from all criminal responsibility. When Coke and Hale wrote, no man was considered mad unless he were either permanently or for the time suffering under some of the most aggravated forms of the disease: since their days the subject has been studied, and numberless ramifications of the same disease have been discovered. Would it be wise to free all madmen from criminal

responsibility because in former times no one was called mad unless he had ceased to be responsible?

"Such a doctrine would have a most injurious operation upon medical science; the physician would be biased in his investigations by the consciousness that he was extending criminal irresponsibility to a new class of persons by every successive discovery of a new form of disease, and he might be placed in the unpleasant dilemma of refusing on the one hand to call things by their right names, or on the other of absolving people quite capable of self-control from all responsibility for their actions. On the other hand, the administration of the law would become altogether uncertain. It would be impossible to assign any intelligible principle for the award of punishments, when by the mere extension of an old name to a new class of symptoms those whom most men would consider as the most atrocious criminals might be saved from punishment. Madness and criminal irresponsibility are, in fact, cross divisions which coincide to a very considerable degree, but by no means exactly; and unless the principles upon which the different classifications proceed be rigidly adhered to, endless confusion will be the result.

"The consequences of the doctrine that the disease, and not the results of the disease, entitle madmen to exemption from punishment are so monstrous, that when stated I can hardly imagine any one bold enough to maintain it.

"Monomaniacs are capable of acting quite rationally upon a variety of subjects, in fact, upon all subjects except those which they connect with their delusion. Now, as this disease may affect the wicked as well as the good, let us suppose that the most ordinary murderer—a man who murders for revenge or for plunder—happened also to be a monomaniac upon some subject totally foreign to his disease, ought he on proof of his monomania alone to be acquitted? I am not supposing the case of a man subject to phomania or to pyromania, but that of a person committing murder from the commonest motives. Suppose, for example, it had been shown that the burglar who shot Mr. Hollest in resisting his lawful apprehension had at one time of his life been confined in a lunatic asylum, would that fact have had any bearing upon the question of his guilt? Yet if we are to regard the madness and not the results of it as the cause of the exemption given to people in this condition, we must say that such a man ought to have been acquitted.

"If madness were allowed *per se* to constitute irresponsibility in criminal cases, our criminal law would form a complete anomaly as compared with the rest of our system.

"Madness does not invalidate a will unless the testator was, by reason of his madness, unable to form a clear determination as to the disposition of his property, and one founded on a correct view of the facts. Madness does not necessarily invalidate a contract,* and it has been very recently determined in the Court of Criminal Appeal† that a madman is not as such an incompetent witness. In that case Lord Campbell remarked, 'Various authorities have been referred to which lay down the law that a person *non compos* is not an admissible witness. In what sense is the word *non compos* employed? If a person be so to such an extent as not to understand the nature of an oath he is not admissible, but a person subject to a considerable amount of insane delusion may yet be under the sanction of an oath, and capable of giving very material evidence.'

"Since all the disabilities of madmen are annexed to the consequences of their disease and not to the disease itself, and are extended no further than those consequences extend, why should not their responsibilities follow the same rule? I cannot but think that both Dr. Ray and other writers upon

* "*Monckton v. Cameroux*, 4 Exch. 17, (in the Exchequer Chamber); and 2 Exch. 487."

† "*Reg. v. Hill*, 5 Cox, 259."

this subject have fallen into a mistake in considering the law inconsistent as to the civil and criminal consequences of madness.

“‘The law,’ says Dr. Ray, ‘invalidates a madman’s contracts. Why does it hold him responsible for his crimes?’ and he quotes with approval M. Georget’s remark, ‘Can we help wondering at those sentiments of Lord Hale, who seems to make more account of property than of life? No excuse for the unfortunate man who in a paroxysm of madness commits a criminal offence, whilst civil acts are to be invalidated when they have no relation to the insane impressions that may have influenced his conduct.’

“Facility in excusing murder is a strange proof of regard for human life; but in fact the law is perfectly consistent; it only places madmen under the same disabilities as infants, or married women, and for the same reason. Certain conditions of mind are an essential element of a contract, and certain other conditions are essential to a crime. Prove the absence of such essential conditions in either case, and you disprove the existence of the crime or of the contract.

“What has been called ‘Moral Insanity’ is another case of a species of madness which cannot in all cases be accepted as an excuse for crime. I find the following case in Dr. Prichard’s ‘Medical Jurisprudence of Insanity’ (pp. 40, 41): Mr. W., aged about 40, was a corn-dealer and baker, and a man of mild and retiring disposition; steady in business, regular and domestic in his habits, highly conscientious, religious without ostentation, correct and cautious in his conversation, and kind and benevolent to all persons. His health was considered to be delicate, but he was never ill, and avoided great exertion, feeling himself not equal to it. He was a married man, and had several children, of whom he was very fond. He experienced some severe losses in his business, which weighed heavily upon his mind, and he became exceedingly depressed. He made great efforts to recover himself from his despondency, and exerted himself with the view of recovering for his family what he had unavoidably lost. He was, to a great extent, very soon rewarded for his efforts. It was was shortly afterwards observed by his friends that his increased exertions had improved his spirits, which, it was remarked, had become much more elevated than they were previous to his depression. He now began to extend his business, in which he was become more keen; he displayed more acuteness in buying and selling, and seldom trusted to others anything he could accomplish himself, and he was ever watchful of an opportunity to make purchases or to effect sales to his advantage. Those changes in his habits went on until his character of industry appeared to his friends to be over performed. His journeys became more frequent—he slept less—his temper grew hasty and irritated—this went on for about ten months; he then spent his evenings away from home, became discontented with his domestic arrangements, took to the use of stimulating liquors, formed improper connections, and at last forsook his family and his business, wandered about the country, sleeping in the open air, and subsisting by the meanest artifices. He was then confined in a madhouse.

“This person was obviously labouring under one and the same disease, in different degrees of intensity, throughout the whole of this period. Was he equally irresponsible throughout the whole time, or indeed irresponsible at all? He was at any rate during part of the time under his own command, he knew the consequences of his actions, and was capable no doubt of being acted upon by fear. Is the law, which does not recognise extreme hunger as an excuse for theft, or the deepest sense of injury as an excuse for revenge (and such feelings are as involuntary as any desires arising from disease can be), to say that because a man does not choose to resist a nervous twitching desire to do something which he knows he ought not to do, he is to stand excused for indulging himself? If that is so, we must wait to punish crime till men become criminals without motive. If in a fit of nervous irritation, caused by impatience

or toothache, a man were to shoot dead some one who offended him, would he not be a murderer? If so, does the bare fact that the conduct of the man mentioned by Dr. Prichard, and of men like him, was produced by disease which ultimately might, or might not, deprive him of reason, put him beyond the pale of responsibility?

"The case of impulsive insanity furnishes almost stronger instances of the impossibility of adopting this view. It is said, that people are frequently urged by an unaccountable and irresistible impulse to kill those who are nearest and dearest to them. I do not the least deny that the fact may be so, nor that the victims of such an impulse ought not to be punished; but if the prisoner is acquitted, it must be because the impulse is irresistible, because the act is not wilful—if he is to be called insane it must be because the impulse is unaccountable; for I suppose no one would hesitate to say that a person having an unaccountable but resistible longing to kill, would be as fairly described as subject to impulsive insanity as if the impulse were irresistible. Thus the guilt turns upon the wilfulness of the act, and not upon the sanity of the prisoner.

"There may have been many instances of irresistible impulses of this kind, though I fear there is a disposition to confound them with unresisted impulses, but there have also been many in which they have been successfully resisted. Indeed, Dr. Prichard quotes several from Esquirol and Pinel. That such persons may have been suffering under the disease of insanity I can well understand; why they should be less responsible than people exposed to any other temptation I do not understand. The totally unreasonable and unaccountable wish to commit murder and suicide may range from a mere passing and momentary fancy up to an uncontrollable passion. Now since all these are but different degrees of the same disease, if it is the disease that makes the irresponsibility, acts done at the suggestion of any the least of these impulses ought not to be punished. If it is their irresistible character that excuses them, then there are cases in which madmen ought to be punished.

"Many persons who would not go the length of saying that no madmen ought under any circumstances to be punished by law, nevertheless maintain that persons subject to insane delusions should not be punished for acts done in consequence of those delusions, and complain of the harshness of the law in requiring anything further in order to justify a prisoner's acquittal than proof of the fact that he labours under an insane delusion. Thus, Dr. Prichard quotes with approval M. Georget's opinion, that 'Partial Insanity, or Monomania, excludes the idea of criminality and responsibility, and takes away from the affected person all responsibility for his actions, whatever may be the nature and extent of the illusions under which he may labour;' but with respect to what he has called moral insanity, he (Dr. Prichard) expresses some doubt. And Dr. Ray argues to the same effect, upon the following grounds:*

"1st. Amid the chaos of the sentiments and passions produced by moral mania, the power of the intellect must necessarily suffer, and instead of accurately weighing and examining the suggestions of the moral powers, it is influenced by motives which may be rational enough, but which would never have been adopted in a perfectly healthy state.

"2nd. Because the real character of his acts being misconceived, he does not associate them with their ordinary moral relations.

"3rd. Because no fear of punishment restrains him from committing criminal acts, for he is totally unconscious of violating any penal laws.

"Dr. Prichard and Dr. Taylor have carried this doctrine a step further, by

* "Ray, *Med. Jur. Insan.*, pp. 234, 235. Dr. Ray's arguments point rather at moral insanity than at monomania, but he seems to consider that the same reasons apply to both cases."

proving that the connexion which subsists in the minds of madmen between their delusions and their actions is so arbitrary and illogical, that if it is once proved that a man has a delusion, it is impossible to say how far any crime that he may commit may or may not be connected with it.

"Thus Dr. Taylor mentions a case of a man who had some insane delusion respecting windmills, and passed his whole time in watching them. His friends removed him to a place where there were no windmills, in hopes that the fancy would wear out. He shortly after enticed a child into a wood, and mangled it frightfully in attempting to murder it. The connexion between the murder and the delusion was, that the madman thought that he might perhaps, as a punishment, be taken to some place where there were windmills.

"From this and similar instances it would appear, that, if we are to admit this doctrine at all, we must admit it to the extent of allowing all persons to go unpunished who are afflicted by any insane delusion. I will proceed to consider that proposal.

"The arguments in favour of it seem to me to be very fairly represented by Dr. Ray, but they are liable to the objection, that they prove, not that there is some peculiar reason for the exemption from punishment of persons under delusions, but that as the law now stands the existence of insane delusions will generally entitle a man to an acquittal, because it has a strong tendency to show either that he does not know what he is doing, or does not know that it is wrong.

"The existence of an insane delusion may in most cases entitle a prisoner to an acquittal, but it is quite possible to put cases in which it would not do so, and in which it ought not to do so. Men sometimes act consistently, as if their delusions were true. Such was the case of Mr. Greenwood (3 B. C. C. 444), who was a barrister, and chairman of quarter sessions. He disinherited his brother, under an insane delusion that he had attempted to poison him. Suppose Mr. G. had been a notoriously wicked person, and under the influence of the same delusion had murdered his brother, which of Dr. Ray's arguments would apply to his case? The man acts precisely as he probably would have acted had the facts been real. He may well associate them with their ordinary moral relations, for I suppose the case of a man habituated to crime. He may be conscious that he is violating the law, and may be careless whether he does so or not.

"I am I own at a loss for any argument in favour of exempting persons under insane delusions from punishment, except arguments to which the present arrangements of the law allow their full weight.

"It has been supposed that this view of the law was taken by Lord *Erskine* in *Hadfield's case*, and by the present Attorney-General in his hardly less celebrated defence of M'Naughten. I think that neither of these cases affords a real foundation for such an opinion. Lord *Erskine* said to the jury, 'You will have to decide whether you attribute it (Hadfield's crime) wholly to mischief and malice, or wholly to insanity, or to the one mixing itself with the other. If you find it attributable to mischief and malice *only*, let the man die. *If you consider it as conscious mischief and malice mixing itself with insanity, I leave him in the hands of the Court to say how he is to be dealt with. It is a question too difficult for me.*' It is a question, however, which must be dealt with, and I think that the illustration I have given shows that the manner in which those who would make every insane delusion a justification for crime propose to deal with it, is unsatisfactory.

"In Sir *A. Cockburn's* speech on the trial of M'Naughten—a speech which it would be presumptuous in me to praise—delusion was no doubt relied upon as proof of the prisoner's irresponsibility, but the argument was not that delusion *per se* and in all cases was a complete answer to a charge of murder, but that it was strong evidence to go to the jury of the incapacity of the

prisoner to say whether the particular act in question were right or wrong. Man, argues Sir *A. Cockburn*, has intellectual and moral faculties—they act through the brain; when there is disease of the brain their action is disarranged; and he concludes, ‘the mistake existing in ancient times, which the light of modern science has dispelled, lay in supposing that in order that a man should be mad—incapable of judging between right and wrong, or of exercising that self-control and dominion without which the knowledge of right and wrong would become vague and useless, it was necessary that he should exhibit those symptoms which would amount to total prostration of the intellect; whereas modern science has incontrovertibly established that any one of these intellectual and moral functions of the mind may be subject to separate disease, and thereby the man may be rendered the victim of the most fearful delusions, the slave of uncontrollable impulses, impelling, or rather compelling him to the commission of acts such as that which has given rise to the case now under your consideration.’

“The Attorney-General’s position, in short, is that a man may be subject to delusions which, without depriving him of all his moral or intellectual powers, may prevent acts done under their influence from being wilful, or from being malicious. This no one doubts, but this is a very different position from the position that the presence of any insane delusion whatever will have that effect.

“Since many persons may be mad, and many persons may be subject to delusions, who would nevertheless be fitting subjects for the punishments of the law, it remains only to consider what is the nature of the operation of the existing law. How would it adapt itself to the various forms of madness which may be given in evidence under a plea of not guilty! I think that on fair consideration it will appear that it approves itself to common sense, and is entirely consistent with the general scheme and principles of legislation.

“The result of the law as laid down by the fifteen Judges in answer to the Questions of the House of Lords in 1843, illustrated by the authorities which I have cited, and by the practice of the Criminal Courts, is briefly this:—That certain states of mind are indispensable elements of crime. That the existence of any disease tending to rebut the legal presumption that such states of mind exist where certain acts have been done, may be given in evidence. That unless the evidence goes to the length of rebutting the presumption of those states of mind, it is not enough to entitle the party accused to an acquittal. In short, the inflexible rule of law is, that in every case, without exception, a wilful and malicious murderer (mad or sane) is to be punished.

“What constitutes malice is a question for the Judge: the existence of the facts from which the Judge is to infer malice is a question for the jury. Now the state of mind from which the Judge will infer malice is a state in which the prisoner is not prevented by any mental disease from knowing that the particular act in question is wrong.

“Some persons of great authority—amongst others Lord Brougham—have said that *wrong* means illegal. I think that if the Judges had meant illegal they would have said illegal; and I am confirmed in this opinion by the circumstance that most of them give a reason for using the word wrong in preference to the word illegal; which reason is, that, if the question were whether the prisoner knew that the act was illegal, the jury would be led to suppose that actual knowledge of the law was necessary, whereas the law presumes such knowledge conclusively. What, then, is the precise meaning of a man’s being disabled by mental disease from knowing that a specific act is wrong?

“Each member of this sentence requires attention.

“1st. The person must be *disabled*. The law asserts that certain acts are wrong, and if any one chooses to act upon a different opinion he must take the consequence. Mere ignorance or mere difference of opinion with the legislator is no justification. Moreover, it is the ability which the law looks to,

and not the actual knowledge. That is to say, the man must be in such a state of mind that it is his own fault if he does not steadily view, and pass a judgment agreeing with the judgment of the law, upon the quality of the act before him. A man may know that an act is right, or think that it is right, and yet be perfectly able to know that the law thinks it wrong; and if he is so circumstanced he is responsible to the law notwithstanding his private opinion, for the law tolerates no acts done in opposition to it, however honestly.

"He must be disabled by *mental disease*. It is not any disability that will be enough. A man may be disabled by passion or by prejudice from following the reasoning of the law; but unless it is mental disease which so disables him, either by weakening his intellectual powers generally, or by introducing into the circumstances of the case delusions of such a nature as to prevent his accurately judging whether the proposed act is wrong, he will not be excused.

"His disability must refer to the *specific act*. It must be observed that it is not required that the prisoner should be entirely destitute of all knowledge of right and wrong. This limitation was probably introduced by the Judges from the Scotch law. In Alison's* Principles of the Criminal Law, it is said, 'The great characteristic of insanity which originates in the general case, in an excessive turning of the mind to its own affairs, consists in an alienation of reason with reference to itself, and in the illusions under which it labours, and the chimeras it has nourished in regard to its own concerns. Few men are mad about others, or things in general,—many about themselves. Although, therefore, the pannel understands perfectly the distinction between right and wrong, yet, if he labours, as is generally the case, under an illusion and deception as to his own particular case, is thereby disabled from applying it correctly to his own conduct, he is in that state of mental alienation which renders him not criminally answerable for his actions.'

"He must be disabled from knowing that the act is *wrong*. It is upon this word that the greatest questions have arisen. I have before remarked upon the reasons why the difficulties which have been connected with it appear to me to be exaggerated. I will now attempt to show, that without any theory of morality at all, or in connexion with any such theory whatever, a very distinct sense may be attached to this word, and very distinct questions raised upon it for a jury. It must be observed, in the first place, that *wrong* means that which the law, and not that which the prisoner considers wrong. If it were not so, a man not believing in morality at all could not be protected by any amount of madness, for as he did not believe in wrong when he was sane, he could not be prevented from perceiving that an action was wrong by madness. Speaking with reference to any rule whatever, I think that in common language there would be a distinction between an irregular and a wrong act. The one violates the letter, and the other the spirit of the rule. If, in working a multiplication sum, a person were, instead of multiplying 7 by 7, to write 7 7's in a line and add them up, he would act irregularly; if he were to compute them to amount to 50, he would act wrongly.

"A somewhat analogous distinction, I think, obtains between what is merely illegal and what is wrong. A man may be said to act illegally who does some act which violates the letter of the law. If he acts illegally, knowing but disregarding the reasons which induced the Legislator to make the law, he does wrong.

"Thus, if a man had just a sufficient glimmer of reason left to remember as a fact that people were hanged for murder, but not enough to know the circumstances connected with murder which make it criminal, namely, the distress and insecurity which it causes, I think that he might well be said to be disabled by disease from knowing that murder was wrong. Upon any theory of

* "Page 465."

morality whatever, the circumstances which surround an act give that act its moral character, and the ability to distinguish enough of these to be able to appreciate the reasons of the law in forbidding the act, is surely a very different thing from the vestiges of memory which would suggest that the act was forbidden.

"Some acquaintance with the reasons of the law is presumed continually in its administration. If it were not so, the maxim that the law is the perfection of reason, and that what is no reason is no law, would be a mere boast, whereas, in fact, the greater part of the law of contracts and of wrongs—the law which regulates the common transactions of life—has grown up from the rational amplification of various elementary principles and rules. It may, therefore, be presumed that the criminal law is not a mere set of iron regulations punishing all who violate them, without regard to any other reason for doing so than the *sic volo sic jubeo* of irresponsible power, but a system laid down for the government of rational beings, whose responsibility depends upon their possession of such an amount of reason as may enable them to appreciate the grounds of some of those obvious enactments, without which no society ever existed.

"I think that the word *wrong* is thus understood by juries in general. If it were necessary to be more explicit, I should be inclined to think that the following would be very nearly equivalent to the ordinary question proposed to them,—Was the prisoner prevented by mental disease from appreciating the reasons for which the law has forbidden the crime of which he is accused, or from applying them to his own case?

"Applying the rule of law thus interpreted to the various cases which may arise, I think it will be approved of by common sense, and I much doubt whether any other would. To take the vexed questions of what are called moral and impulsive insanity: Can any course be suggested more reasonable than that of saying, Let these strange impulses be shown to be as they are often called *irresistible*, and they shall exempt the subject of them from punishment, because they sustain a traverse of the averment in the indictment that the act done was wilful?

"If the law is to rest satisfied with proof, not of an irresistible, but merely of an unresisted impulse, it gives a sanction to all sorts of crime, yet the person is as undeniably under the impulse of disease when he feels a resistible as when he feels an irresistible impulse. To illustrate this, I would refer to the case, which is still fresh in general recollection, of Mrs. Brough. Let us consider how far the public would have been satisfied if that case had been determined upon the ground that any person suffering under insanity was to be acquitted. I assume hypothetically that the facts of the case were these—as at any rate they well may have been,—That the woman, being unfaithful to her husband, thought of murdering her children from a sort of Medea-like fury, and that a rush of blood to the head acting on an excited brain was the immediate occasion of that thought being transmuted into action; in short, that if she had either been chaste or healthy the act would not have been done. As the law now stands, the question for the jury on this state of facts would be, whether, under all the circumstances of the case, the act was voluntary? If the law were altered, the question would have been, had disease anything whatever to do with the act? This mode of treating the case would have prevented the question as to whether the impulse was irresistible from being even raised. The law having declared that any insane impulse should be a justification, the only question would have been the existence of such an impulse. As it was, the verdict gave ground to many criticisms, even though it was in effect that the impulse was irresistible. Suppose the result of the trial had only been to show that there was such an impulse, what would have been the feeling on the subject?

"Apply the law as it stands to the case of insane delusions. Bellingham, I will suppose (for in all these cases I assume the facts merely for the sake of illustration), shot Mr. Perceval, because he was under an insane delusion that Mr. Windham had injured him, and under a sane delusion that the person at whom he had fired was Mr. Windham. A verdict of not guilty, under the law as it now stands, would have been equivalent to saying, the disease in Bellingham's mind, which produced the delusion, extended so far that he was incapable of understanding that the law would regard him as causing a public and private calamity, and as setting a bad example. A verdict of not guilty under the proposed amendment of the new law, would be consistent with a state of the prisoner's mind, affording as little excuse for what he did as his mistake as to the identity of his victim.

"Or take the case of Hadfield. Hadfield thought that he was our Lord; that it was necessary for the salvation of the world that he should die; that he ought not to kill himself; that firing at George III., or in his direction, he should be hanged, and that the world would be saved.

"Interpret *wrong* in this case to mean *illegal*, and Hadfield could not have been acquitted. The very reason of his conduct was, that his act was illegal, and that he should be punished for it; and yet if he were punished it is hard to say who ought to be acquitted. The verdict of not guilty actually returned amounted to this. True it is, that Hadfield knew what he was doing, and knew that he was breaking the law, but his delusions introduced into his mind a set of considerations—surrounded the act he was doing with a set of circumstances, which entirely prevented his estimating its character.

"Upon the facts which I have stated, I think no one will doubt that Bellingham was rightly punished (though, in fact, his trial was unjust, on account of the refusal of the Judge to postpone it for the collection of evidence), and that Hadfield was rightly acquitted. Could any course except that adopted by the law have secured that result?

"A suggestion, originating, according to Mr. Prichard, with the German jurist Hoffbauer, has been made, that the delusion should, for the purposes of justice, be considered as real; and that principle has to a certain extent been adopted by the fourteen Judges in their judgment referred to above. 'If a person,' ask the Lords, 'under an insane delusion as to existing facts, commits an offence in consequence thereof, is he thereby excused?' The Judges answer, 'assuming that he labours under such partial delusion only, and is not in other respects insane, we think he must be considered in the same situation as to responsibility as if the facts with respect to which the delusion exists were real.' It will be observed that the Judges do not say that the existence of an insane delusion, which, if real, would not justify the act done, may not be evidence to go to the jury on the question as to whether the prisoner knew that the act he was doing was wrong. Great injustice might be done to prisoners if this were not so.

"At the last Summer Assizes at Derby, a man was tried for murdering his child. It was proved that he believed that God had ordered him to do so; and he accordingly did it without concealment, but with every possible instance of contrivance and premeditation. Whether, if the delusion had been the fact, he would not have been still punishable *in foro humano*, is an extremely doubtful question. Persons with a settled sane conviction of such a doctrine—as was the case with the Thugs—were punished for what they did in consequence of it; but that such a delusion would or might introduce circumstances into the case, which would interfere with the estimate which the prisoner would form of the quality of the act he was doing, cannot be doubted, and a jury might very naturally say, a man under such a delusion could not be expected to understand that his action fell within the scope of the reasons which have induced the Legislature to forbid the murder.

"The law as it at present stands affords the insane every immunity consistent with the safety of society; for though mere proof of the existence of some insane delusion, or of what are called the moral and impulsive forms of insanity, will not *per se* justify a verdict of not guilty, yet it will in general raise such a presumption that the prisoner did not know that the particular act of which he was accused was wrong, that, in the absence of any proof of express malice, the jury will generally acquit upon that ground.

"In *Buranelli's case*—tried at the March Sessions at the Old Bailey—many instances of singularity of conduct on the part of the prisoner were given in evidence, and it was proved that he laboured under a positive delusion as to the symptoms of a particular complaint by which he was afflicted. There were, however, circumstances in the case which seemed to show that he had had a quarrel with the man whom he put to death. He was accordingly convicted and executed. If he had killed some one whom he had never seen before, and entirely without apparent motive, those circumstances, coupled with the strangeness of his conduct and the delusion of which he was the victim, would in all probability have procured his acquittal.

"I could hardly find an instance which illustrates more clearly the position for which I am contending; namely, that however the burden of proof may in the course of the investigation be shifted from one side to the other, the question to be ultimately solved is and ought to be, was the prisoner able to know that the act he was doing was wrong? The various misunderstandings which have taken place upon this subject mostly arise from confounding together the thing to be proved, and the means of proving it.

"No doubt proof of insanity generally, or of insane delusion specially, is strong presumptive evidence of the prisoner's irresponsibility; but it is evidence merely, and evidence of the effect of which the jury is the proper judge, and whatever faults may be found with juries, no one will charge them with giving too little weight to such evidence.

"I doubt whether it is possible to put a case of a person who wilfully and maliciously commits a crime whom the public would not wish to punish, if all the circumstances of the case were before them. I doubt whether any course of proceeding could make a nearer approach than is made by the present rules of law to the provision of means for the punishment of all such persons, and the exemption of all others.

"It is now an admitted principle of jurisprudence that the object of punishment is the prevention of crime, and that except in so far as it has that tendency it is an evil. The rules of law with respect to the punishment of madmen are in entire agreement with this principle, for it is notorious that mad people in general are as much acted upon by fear as those who are sane, as to those acts which are in any way under their own control. The cunning with which they will often conceal their insanity when examined on commissions of lunacy proves this conclusively.* The law as it now stands recognises in their case the distinction that it would be useless to punish them for acts of which they cannot appreciate the criminality, because for such acts they would not anticipate punishment. A man, for example, might abstain from murder because he might suppose that he would be hanged for it; but that would not induce him to abstain from breaking crockery, yet he might be under a delu-

* "When Martin, the incendiary of York Minster, was to be tried, various inmates of a madhouse were talking over his case. One of them remarked, 'Oh, they cannot punish him; he is one of us.' I have somewhere read of a madman who tried desperately to kill his keeper, and on being overpowered cried out, 'I will murder you yet; they can't hang me for it; I am mad!'

"In the debate in the House of Lords, on the 13th March, 1843, on this subject, Lord Brougham said, that Sir H. Halford had told him that madmen were as much, if not more liable to be influenced by fear than others."

sion that he was breaking crockery when, in fact, he was killing another man. So, too, it would be useless to punish a man for an act which though in fact wrong he could not recognise as such on account of delusion. If a man fancied that God had ordered him to put another person to death, the fear of punishment would deter him but slightly, if the delusion were strong, probably not at all; for the mere fear of pain or of death has less deterring influence over persons contemplating crime, than the fear of that universal and solemnly-pronounced disapproval of which an ignominious death is the outward and visible sign. In the case which I have supposed, this element of punishment would be quite wanting, for the man would say, 'If they knew the true quality of my action, they would approve of it. They put me to death not for what I have done, but for something else which they falsely suppose me to have done.'

"It has been ingeniously argued, that the punishment of the sane is enough to deter from crime both sane and insane, and that upon this ground madmen might be exempted from punishment.

"Nothing so entirely weakens the force of any course of conduct as capricious exceptions resting on no principle. Suppose it were enacted that out of 1000 persons convicted only 999 should be punished, and that every man on conviction should draw lots for the chance, would not the most ordinary knowledge of human nature tell us that such an enactment would diminish enormously the preventive effects of the law? The implied confession, that criminal law is only conventionally and traditionally necessary, that it is to be put into execution as reluctantly as possible, that crimes are not of much real importance, but that to satisfy existing prejudices they must be punished, would go far to destroy the moral force of any law whatever. I can see nothing but a less glaring form of this error in the proposal to free all madmen from responsibility; surely the proper course is not to snatch at an excuse for freeing a whole class from punishment, but to ascertain dispassionately the reasons which make it inexpedient to punish most of the members of that class, to extend impunity to those to whom those reasons apply, and to no others. This course the law at present adopts; can any other be suggested which would not involve it in gross injustice and inhumanity, or commit it to metaphysical and medical propositions of the truth of which it has no special means of judging?"

CLAIM OF PRIORITY IN THE REFORMATION OF THE TREATMENT OF THE INSANE.*

In the last January number of this Journal, p. 72, we had occasion to refer to our previously strongly expressed conviction that to Pinel is due all the glory of having transformed the abode of the lunatic from a dungeon to a drawing-room or library. (January, 1854, p. 152.) We then alluded to our sentiments upon this well known fact in the history of Psychological Science, in consequence of a counter-claim recently advanced by M. Brierre de Boismont, on behalf of a comparatively obscure psychologist, M. Daquin, of Chambéry. To that claim we gave the respect and attention to which we deemed it entitled from the high reputation of its advocate. A descendant, however, of the great Pinel has come forward to challenge the statements of M. Brierre de Boismont. Dr. C. Pinel vindicates the title of his illustrious ancestor to the exalted and glorious position hitherto accorded to him by his contemporaries and by posterity.

Justice to the memory of Pinel, and to the filial vindication thereof by his

* "De la Réforme de Traitement des Aliénés." Par Dr. C. Pinel, Neveu. pp. 16. Paris: 1855.

nephew, as well as the consideration of the great importance of this question in the history of psychological medicine, require that we should fully give the refutation of a statement to which we had, it seems, lent some weight by the space we devoted thereto on the occasion above-mentioned. Daquin, says M. Briere de Boismont, published his "Medico-Philosophical Treatise upon Insanity" at Chambéry in 1791, and at Paris in 1792. Pinel's treatise, having a similar title, was published in 1801. The interval of ten years was surely enough to have established the claim to priority, it may plausibly be urged.

Two essential elements of the controversy have, however, to be borne in mind in determining the dispute. First, the matter of fact: second, the nature of the views propounded by the respective authors. By the help of Dr. C. Pinel we shall enlighten our readers on these two primary branches of the inquiry.

1. Pinel, in 1783, was in charge of the inmates of the *Maison de Santé* of Dr. Belhomme, where he had already, on a small scale, put in practice those reforms which he subsequently carried out more extensively in the Bicêtre; he was at the same time chief editor of the *Gazette de Santé*, in which he had inserted numerous articles upon the treatment of the insane; in 1789, he published therein an article more especially inculcating the moral treatment of insanity. Before the first revolution, he had communicated to the *Société Royale de Médecine* an essay on the classification and moral treatment of lunatics; in 1790, Pinel successfully competed for a prize offered by the same learned body for an essay upon similar subjects; in 1790, he also inserted in the *Journal Gratuit de Santé* the history of a case of erotic melancholia cured by gardening, bathing, &c.; in 1791, he published in the journal, *La Médecine éclairée par les Sciences Physiques*, observations upon suicidal melancholy and its treatment by moral means. Towards the end of 1792, Pinel's celebrity in the department of psychological medicine obtained for him the appointment of Chief Physician to the Bicêtre, where one of his first acts was to liberate fifty of its manacled inmates. Verily this was the *fait accompli*! in the very same year that Daquin was publishing his ideas in a book that has scarcely survived its author, who would himself, probably, be amazed at the weight of honour now sought to be thrust upon him.

So much, then, for the matter-of-fact—the chronology of the writings of Daquin, and the writings and doings of Pinel.

2. The second division of our inquiry need not occupy us very long. We have seen that Pinel practically carried out ideas to which he laid not the claim of originality, but which he traced in the works of preceding authors as far back as Celsus and Caelius Aurelianus. Daquin pretended to originality of the same ideas which he did not carry out, even on the small scale within his reach. M. Daquin's treatise, so far, then, in its advocacy of the moral treatment of insanity, differed not greatly from most of its predecessors. Pinel showed that chains could be dispensed with. Daquin was silent on the matter of chains. Pinel, liberal and just, did not hesitate or fear to direct attention to all writers of works possessing sufficient merit to have attracted his notice; his silence, therefore, with regard to Daquin's work, which is dwelt upon by M. Briere as evidence of disingenuous plagiarism on the part of Pinel, tells rather in another direction, viz., as his nephew infers, that Daquin's work was among those of which he "*pris le parti sage de les passer sous silence*." Pinel was too nobly engaged in the practical enforcement of his enlightened views to have condescended to such petty jealousy as is here insinuated.

We have thus, following Dr. C. Pinel's defence, discussed the essential elements of the controversy, and have, we trust, done strict justice to the memory of the great Pinel.

RETROSPECT OF THE AUTOPSIES PERFORMED IN THE VIENNA LUNATIC ASYLUM OF THE PATIENTS WHO DIED IN 1853.

BY DR. GAUSTER,

Second Physician to the Institution.

THE physiology and pathology of the nervous system are the basis, the nucleus of psychiatry. A disease can only be caused by a diseased organ: a Power, the Immeasurable, the Imponderable, the Transcendental, cannot be sick! In the new Vienna Lunatic Asylum the end has been steadily kept in view of tracing the material appearances, without overlooking the rest.

Statistical tables play at the present moment no inconsiderable part: perhaps they are too much confided in. A statistical collection of our autopsies could not in prudence warrant any important results, because they have not yet been accompanied by microscopical investigation. But we may still hope for some negative replies, and even this is a gain. Nervous physiology and pathology have as yet but little of the positive. The *post-mortem* examinations of the year 1853 gave a negative answer to the question—Can a given form of psychical disease be traced back with scientific exactness, or with probability, to particular pathologies—anatomical changes of the organs concerned? But even here, in the gloom of the comfortless though some rays of light are revealed which promise that investigation will lead to definite results in the future, it is a source of satisfaction, at least, that what science has already formulated, will be found to be confirmed by our conclusions.

179 patients died in the year 1853 in the Vienna Imperial Lunatic Asylum. Of these 171 were submitted to inspection.

In order to determine the relations of the individual phenomena to each other, the principal phrenopathic conditions have been compared with the most remarkable appearances in the brain, as well as with those of the organs of circulation; and lastly, it has been sought how often they existed without alterations in the brain. Since it is known what great influence disturbances of the circulation of the blood exert over the causation, development, and persistence of phrenopathies, there must also be taken in careful consideration thickened and calcareous arteries at the basis of the brain, dilatations, and deposits of the aorta, especially of the arch and ascending portion; and lastly, diseases of the heart, as hypertrophy and insufficiency of the valves.

The organs of digestion have been passed over, because their diseases, in a phrenopathic point of view, are sometimes quite absent, and at others unimportant. So it is with the liver, which, although not seldom having some influence upon mental alienation, is yet too often judged and condemned unjustly.

The organs of respiration also have not been much considered. These comparisons of the most important particulars have not yet given any remarkable results; but it cannot be doubted that the origin of individual forms of alienation, contemporaneously with different diseases, and not unfrequently with several together, is possible, just as we find to be the case with functional disturbances of other kinds.

It cannot be denied that the result of the comparison of the appearances in the dead body with the observation of the living man will appear of greater value, if we compare not only the forms of the disease, but also the symptoms of the diseases. But this is a work much more laborious, and one demanding the closest application and continuous observation.

The per-centual proportions of the more important results of the *post-mortem* inspections have been compared with the gross number of the inspections, and with the individual forms of mental diseases.

The fundamental forms of alienation in vogue have been used: the forms of exaltation, mania, delirium tremens; of depression, melancholy in its various

aspects, and those of debility; secondary dementia, dementia with progressive paralysis, congenital dementia.

The most important deductions from the whole comparisons are the following:—

1. The highest per-centage upon all the *post-mortem* appearances is exhibited by œdema of the membranes, 52·046 per ‰; chronic hydrocephalus, 50·292 per ‰; œdema of the substance of the brain, 23·946 per ‰; sclerosis of the brain, 21·637 per ‰; diseases of the aorta, 12·869 per ‰; thickening of the inner membranes of the brain, 11·111 per ‰; diseases of the heart, 9·941 per ‰. No abnormal appearance in the brain was found in nineteen cases, or 11·111 per ‰. Here it is to be observed that every condition of greater hardness of the brain-mass was estimated as sclerosis. Very strongly-marked sclerosis was present in two cases only.

2. There was no one of the more frequently found brain-appearances that was not observed in connexion with all the fundamental forms of alienation, excepting the adhesion of the meninges with the periphery of the brain, which was only found in the exaltation-forms, in conditions of debility, and of epilepsy with mental disturbance, preponderating, however, in paralytic dementia; then the thickened and calcareous arteries of the basis of the brain which was wanting in the forms marked by depression; the discoloration of the grey substance, heart-diseases and the aortal diseases, all of which were found wanting in epilepsy with mental disturbance.

3. Instances occurred in all the chief forms of alienation, in which no disease was found in the brain, but most frequently was this the case in the forms of depression, 21·739 per ‰; least frequently in the exaltation-forms, 4·878 per ‰.

4. Most commonly serous effusions were found, especially on the surface of the brain, then in the cavities; serous effusions in the meninges were most frequent in the exaltation-forms, 68·293 per ‰; thence falling in the depression-forms to 60·869 per ‰; in conditions of debility to 53·763 per ‰; in epilepsy with mental disturbance to 50 per ‰. Serous effusions into the cerebral cavities were also found most frequently in the exaltation-forms, 60·975 per ‰; then in conditions of debility 52·688 per ‰; least often in the depression-forms, 26·087 per ‰. Œdema of the brain-mass was also most frequent in the exaltation-forms, 26·831 per ‰; and least frequently in epilepsy with mental disturbance, 21·429 per ‰.

5. The greater hardness of the brain, estimated here under the designation sclerosis, was most frequently found in the depression-forms, 30·435 per ‰; least so in the exaltation-forms, 14·634 per ‰.

6. Thickening of the arachnoid was most frequently found in the exaltation-forms, 14·634 per ‰; then in epilepsy with mental disturbance, 14·286 per ‰; least so in the depression-forms, 4·348 per ‰.

7. Bony formations on the skull and in the brain were not found in the depression-forms. Those on the skull were most frequently seen in the exaltation-forms, 7·317 per ‰; and in epilepsy with mental disturbance, 7·143 per ‰; those of the meninges in conditions of debility, 5·376 per ‰; chiefly in paralytic dementia; then these were found in the exaltation-forms, 4·878 per ‰.

8. The discoloration of the grey substance was most common in the exaltation-forms, 7·317 per ‰; then in the conditions of debility, 6·452 per ‰; least so in the depression-forms, 4·348 per ‰; and in epilepsy with mental disturbance, never.

9. Diseased basal arterics and aorta were most common in the conditions of debility; the first, 9·677 per ‰; the latter, 15·054 per ‰; heart-diseases in the depression-forms, 13·043 per ‰; in exaltation-forms, 12·219 per ‰.

10. Uterine polypi and fibroid tumours were present in the exaltation-forms.

11. Diseased conditions of exhaustion, of weakness, as general anæmia, marasmus, tabes, were found most frequently in the conditions of debility, then in melancholy.

12. Tuberculosis plays especially a not inconsiderable part; excepting in epilepsy with mental disturbance, it was most common in the exaltation-forms.

13. Diseases of the bronchial tubes, as catarrh, bronchitis, bronchiectasis, were most common in the exaltation-forms.

14. Liver and stomach diseases were proportionately more frequent in delirium tremens: on the other hand, in the depression-forms many diseases of the kidneys and spleen were present.

15. In respect of the determinate pressure of one brain-appearance with another brain-appearance, or with a morbid appearance of the other organs, this analysis gives nothing certain or positive.

16. Lastly, no definite and incontrovertible conclusion as to the psychical disturbance present during life is indicated by the forms of morbid appearances; neither by combinations of these.

We will relate briefly some of the more interesting appearances:

1. A case of congenital partial absence of the left hemisphere of the brain, in an idiotic girl of thirteen, who died with dropsy and paralysis.

2. A case of absence of the corpus callosum in a clergyman, aged twenty-five, who died of tabes; and who, from his twentieth year, was epileptic after a fright, and then gradually became demented.

3. A case of fibrous carcinoma in the septum and fornix, extending to the substantia perforata and optic nerves, then losing itself in the cerebral substance above, and below, and behind, extending to the hippocampus major. The hinder part of the left lobe of the brain was yellow and softened; on the inner wall of the left posterior horn, on the border of the before-mentioned softened spot, the carcinoma was as large as an egg, and was adherent to the thalamus opticus of this side, and as well as the superficial laminæ of this last, was infiltrated with hæmorrhagic spots. The corpora striata and thalami of both sides were dragged out lengthwise. The patient had suffered from dementia following upon headaches and excitations.

4. A remarkable case of a foreign body in the brain-substance in a person thirty-four years old, who died in an epileptic fit. In the hairy scalp, three inches above the left ear, was a white bald spot; under the occipito-frontalis muscle there was found in the skull a cavity surrounded exteriorly by an edge somewhat rounded, and interiorly sharp, with a soft brownish callus adhering to the margin of the opening. After removal of the skull-cap there projected over the first opening, which was exactly over the interior branch of the middle meningeal arterial, into the dura mater, a black-brown body adhering to the fore-part of the callus, and penetrating into the brain, and just over the middle of the Sylvian fissure covered with a yellowish delicate callosity. Besides this there was present hyperæmia of the brain and meninges. The patient from his youth suffered from epilepsy; he had been struck three or four years back in a pot-house, nothing more being learned of him; he exhibited in the asylum dementia, with occasional excitations and epilepsy, but no symptom that pointed with clearness to their appearance was discovered.

5. A case of tubercle in the right hemisphere, in a patient who had suffered from dementia with hardened brain-mass, œdema of the brain and meninges, depositions in the aorta and pleuritic exudations. The tubercle was of the size of a walnut enclosed in the outer part of the right corpus striatum, by a reddish vascular web; in its outer layer it consisted of a yellow very thick mass, whilst the central part consisted of an œdematous cellular tissue. The surrounding structure was in a state of white softening, the rest very hard.

6. A case of hypertrophy of the thyroid gland, with œdema and thickening of the inner membranes of the brain, adhesion of these to the peripheral substance of the brain, and chronic hydrocephalus, then pulmonary tuberculosis. The thyroid gland was enlarged sixfold, its right lobe was so lengthened

downwards that its rounded lower edge reached into the cavity of the chest down to the basis of the pericardium. The left vena anonyma was compressed by it, and quite closed; above the compressed spot, it and its branches were filled with coagula. The patient suffered from dementia, with strong hallucinations, excitation, and progressive general paralysis.

In conclusion, we append some remarks upon the results of this analysis, and especially in comparison with those found elsewhere.

When Guislain, in his latest work, says: "In spite of my many and painstaking investigations on the bodies of insane after the elucidation of the nature and seat of mental diseases, I must confess that I have not arrived at the hoped-for results," this admission of so great an authority will excuse the slender results we now publish. But since no doubt at present exists that phrenopathies consist in a disease of the nervous centres, this observation will only stimulate us to continued and closer toil, and to employ every possible aid. Moreover, the continued investigation has ever shown fewer cases of insanity in which no abnormal brain-appearance was found.

For example, Pinel found, out of 261 autopsies, 68; Esquirol, out of 277, only 77 cases in which diseases of the brain were recognised in the body. On the other hand, Parchappe found 152 such cases out of 160 autopsies; and Webster, out of 72 autopsies, alterations in the brain in every case. In our report, there appear out of 171 autopsies, 19 cases of absence of abnormal brain-appearances; and it is to be remarked that the microscope was not employed.*

The most pre-eminent part in the preceding analysis is played by serous effusions into the brain and its meninges. It is often difficult, indeed, to determine whether these be primary or secondary, or what is their importance in relation to the form of disease. There is an old controversy, whether serous effusions primarily act upon the psychical functional phenomena through pressure, or secondarily proceeding from phrenitis, or habitual congestions, only keep up the scene. Later times established both views. This statement shows that they are found in all the forms in all congestions and inflammations. The hardness of the brain, as here understood, showed itself relatively highest in the depression-forms. Induration of the brain, according to Guislain, was found 25 times in 100. This analysis shows, out of 171 autopsies, 37 cases, or 21·637 per $\%$, although the extent varied much. Griesinger thinks induration belongs especially to dementia.

Morgagni found, in 13 autopsies, 11 times sclerosis, especially of the medullary substance. Parchappe has, in 313 insane persons, found 81 times the entire brain-medulla sclerosed; Esquirol found, in 54 demented persons, 15 times increased hardness of the medullary substance of the brain.

The adhesions of the membranes to the periphery of the brain have given rise to many discussions. By some it has been held that congestions in the cortical substance or pia-mater; by some, that inflammations of those structures, were the cause; by some they are regarded as the result of organized exudations. It has been thought that the most superficial layers of the cortical substance were destroyed through them. Recent researches give to both the two first views great probability. Their presence in the conditions of debility is frequent, 11·828 per $\%$: 11 times they were present in these forms of disease, and, moreover, 9 times in progressive paralysis. This agrees with the observations of Bayle and Parchappe.

* It is also to be remarked and to be regretted that the method of testing the absolute weight and the specific gravity of the brain, which has yielded such valuable results to Drs. Sankey, Bucknill, and others, was not employed. Let this be one of the "further possible aids" which the author promises to use in his future researches. The author, for example, does not appear to have recognised such a condition as atrophy of the brain—one of the most common and important of the conditions found in the brains of the insane.

Atrophy of the brain has been much discussed of late. Means of determining this condition with accuracy are wanting. Doubtful instances of atrophy were found four times.

Thickening of the inner membranes with opacity is a "condition which doubtless depends upon preceding congestion or inflammation," and perhaps upon other conditions yet unknown to us. We found these most frequently in the exaltation-forms, namely, out of forty-one cases, six times. In fourteen cases of epilepsy, twice.

Organic diseases of the heart, in connexion with alienation, have of late attracted much attention. Their relations have become of greater importance, inasmuch as heart-diseases have been disproved in remarkable frequency in living lunatics; and in these cases it ought not to be overlooked that greater excitation has attended unhealthy heart-sounds, which have been replaced by healthy sounds at periods of quietude. This has been observed in no small number of our patients. It cannot be denied that heart-diseases, through the "consequent irregular blood-circulation," may often occasion diseases of the brain and mental disturbance. The thickening and depositions of the basal arteries may often be the cause of brain-diseases, which induce disturbance or weakness of the intellectual force.

Tuberculosis has also given its contingent in this inquiry.

The author concludes by remarking that the post-mortem examinations were not conducted with all desirable minuteness, the arrangements of the dead-house of the hospital not permitting.

AMERICAN INSTITUTIONS FOR THE INSANE.*

1. In July, 1852, Dr. Andrew McFarland resigned the office of Superintendent of the *New Hampshire Asylum for the Insane*, having, in the language of the Trustees of the Institution, "with signal ability and devotion discharged the duties for about seven years." He was succeeded by Dr. John E. Tyler, in whom the Trustees believe that they have "a judicious, efficient, and devoted Superintendent."

The report of Dr. Tyler for the fiscal year ending on the 31st of May, 1853, seven months after he became connected with the asylum, is limited to about half a dozen pages, and contains but little matter of general interest to medical men. It is a very prudent and sensible production for a beginner.

	Men.	Women.	Total.
Patients in the Asylum May 31, 1852	63	55	118
Admitted in the course of the year	68	64	132
Whole number	131	119	250
Discharged, including deaths	61	46	107
Remaining May 31, 1853	70	73	143
Of those discharged, there were cured	41	22	63
Died	5	3	8

Dr. Tyler complains that the number of patients is so great as to prevent a proper classification of them.

- * 1. Of the New Hampshire State Asylum, for 1852 and 1853.
- 2. Of the McLean Asylum, for 1853 and 1854.
- 3. Of the Retreat at Hartford, for 1853.
- 4. Of the Asylum for the Poor, Blackwell's Island, N. Y. City, for 1853.
- 5. Of the Indiana State Hospital, for 1853 and 1854.
- 6. Of the Illinois State Hospital, biennial for 1853-54.
- 7. Of the Missouri State Asylum, biennial for 1852-53.

The report for the year ending May 31, 1854, is somewhat more extended than its immediate predecessor, but is in a great measure confined in its subjects to the *matériel* of the establishment, and to topics already familiar to our readers. The doctor complains of the pressure from without of patients, and proposes that an additional wing and a building for the violent shall be erected. "The house is now lighted with gas, and we not only find its use more convenient, comfortable, and cleanly than oil, but its brilliant light a curative means in making our previously half-lighted halls cheerful and pleasant." He says nothing of the comparative expense.

	Men.	Women.	Total.
Patients, May 31, 1853.	70	73	143
Admitted in course of the year	72	69	141
Whole number	142	142	284
Discharged, including deaths	67	56	123
Remaining, May 31, 1854	77*	84*	161
Of those discharged, there were cured	34	29	63
Died	7	7	14

The whole number of patients exceeds that of any previous year by 64.

"During the whole year our household has enjoyed remarkable physical health. We have been entirely exempt from epidemics of all sorts, and acute disease has been almost unknown. Cleanliness, regularity of life, and a most healthful location have been the chief causes of this desirable state of things. The deaths which have occurred, with a single exception, were of those who for a long time had been considered incurably insane, and who at last were literally worn out by the continued and unremitting force of their malady."

Patients admitted from 1843 to 31st May, 1854	1199
Cured	497
Died	106

2. Dr. Bell, of the *McLean Asylum*, has written but a few reports of any length, and in the two which are now before us he is even unusually brief, both of them occupying but about a dozen pages. One reason of this brevity is mentioned in the extract which we subjoin, merely remarking that, although it may be good and sufficient for the district from which the *McLean Asylum* is principally supplied with patients, it is hardly equally so for many other sections of the country.

"There was a period in the history of the institutions for the insane of this country when their annual reports were looked for with an interest natural to a new topic, and when so many communities were about engaging in the great work of providing for the insane, that all information which could throw light upon the path of duty was eagerly and gratefully accepted. That time is now passed, for the demand has been essentially met, and good taste and propriety are no longer in antagonism with philanthropy, as to spreading to the world the often painful incidents connected with a sad disease and its victims. It would ever be an easy service to furnish a prolonged and interesting narrative of the cases of an asylum, were the motives now allowable which formerly justified such communications with the public."

	Men.	Women.	Total.
Patients at the commencement of 1853 . . . . .	...	...	201
Admitted in course of the year	61	53	114
Whole number . . . . .	...	...	315
Discharged, recovered	30	28	58
Died	7	10	17
Remaining at the close of 1853 . . . . .	...	...	195

"From a minute, kept during a portion of the year," says the report, "it is

* According to the previous figures, these should be 75 and 86.

probable that we have been obliged to refuse three times as many patients as have been received."

It will be remembered by those who have read our previous notices that Mr. Appleton gave a large fund to this institution, for the purpose of constructing apartments specially intended for persons able and willing to pay a liberal remuneration for their accommodations. The object of the donor has been partially accomplished. The "Appleton ward" for men has been completed, and in reference to its operation we find the subjoined remarks:—

"The patients themselves, in these rich and spacious quarters, can draw no unfavourable comparisons with their situations at home, and are spared one pang in the distress incident to their disease. The only drawback suggested or anticipated—that the patients who did not enjoy the new accommodations might indulge a certain sentiment of jealousy towards their more fortunate associates—has never been manifested."

Report for 1854:—

	Men.	Women.	Total.
Patients at the commencement of the year	94	101	195
Admitted in course of the year	70	50	120
Whole number	164	151	315
Discharged, including deaths	67	53	120
Remaining at the close of the year	97	98	195
Of those discharged, there were cured	32	27	59
Died	5	11	16

The McLean Asylum was opened on the 6th of October, 1828. It was under the superintendence of Dr. Wyman about sixteen years, and of his successor, Dr. Lee, two years. Dr. Bell has been the incumbent of the office since the commencement of 1837, a period of eighteen years. We believe this to be the longest term of service of any officer who has occupied an office of the kind in this country.

Patients admitted under Dr. Wyman	1122
“ “ Dr. Lee	189
“ “ Dr. Bell	2572
Whole number admitted	3783
Discharged, including deaths	3588
Cured	1802
Died	322

"I cannot but believe," remarks Dr. Bell, "that the time is near when the necessity of dividing this asylum, and establishing a department for one sex elsewhere in the vicinity, will result in action. The financial experience of this establishment, for many years past, would seem to demonstrate that the first outlay for such an addition to the means of treatment of those classes of the insane who are now mainly received here, would be all the demand needful upon the philanthropic and liberal of our community."

3. The last report from the *Retreat* at Hartford, Connecticut, which we passed under review, was issued during the absence of the Superintendent, Dr. BUTLER, upon a European tour. The one now before us bears his signature.

	Men.	Women.	Total.
Patients in the Retreat, March 31, 1853.	80	90	170
Admitted in the course of the fiscal year	74	103	177
Whole number	154	193	347
Discharged, including deaths	65	96	161
Remaining March 31, 1854	89	97	186
Of those discharged, there were cured	22	42	64
Died	13	9	22

The Retreat was opened on the 1st of April, 1824. For ten years it was under the superintendence of Dr. Todd, six years under Dr. Fuller, and three years under Dr. Brigham. At the date of this report it has been eleven years under Dr. Butler.

Patients admitted in course of the term of Dr. Todd . . .	520
“ “ “ “ Dr. Fuller . . .	481
“ “ “ “ Dr. Brigham . . .	246
“ “ “ “ Dr. Butler . . .	1388

	Men.	Women.	Total.
Whole number admitted	1266	1369	2635
Cured			1331
Died			265

Thus the deaths of *cases*, during thirty years, was 10·05 per cent. But, upon reference to another table, we find that the whole number of *persons* who made up these 2653 *cases* was but 1798. Of these 1798 *persons*, 248 were admitted twice each, 65 three times, 17 four times, 10 five times, 4 six times, 1 seven times, and 1 nine times. Of 1798 *persons*, 265 died, which is 14·73 per cent. The proportion of cures, upon admissions, was 50·05 per cent. But the same *person* may, in many instances, have been cured two or three times, and, in some instances, four, five, or six times. The report throws no light, even by comparison of tables, upon the number of *persons* cured. This is an imperfection which, as we have heretofore remarked, pervades nearly all the American statistics of insanity.

One further illustration, which we overlooked until the last preceding sentence was written. Dr. Butler states that the per centage of deaths on the whole number discharged since the opening of the institution is 10·82. This is correct, if calculated upon the number of *cases*. But what is the result, if otherwise regarded? Of 1798 *persons* admitted, 186 remained in the asylum. Hence, 1612 have been discharged. Of 1612 *persons* discharged, 265 died, equal to 16·43 per cent.

Of 1203 cases admitted since March 31, 1845, the age, at the time of first attack, was between 20 and 30 years in 402; between 30 and 40 years in 240. The excess of the former is equal to 66 per cent.

The causes of death in 196 cases, which have occurred since the 31st of March, 1841, were as follows: Exhaustion 36, dysentery 21, general debility 19, phthisis 14, apoplexy 12, general paralysis 12, paralysis 10, erysipelas 10, disease of the brain 9, old age 7, marasmus 7, suicide 7, “disease of lung” 5, epilepsy 4, inflammation of bowels 4, fever 3, internal hæmorrhage 3, chronic diarrhœa 3, “injury” 2, disease of heart 2, psoas abscess 1, inflammation of liver 1, disease of uterus 1, acute diarrhœa 1, dropsy 1, cancer 1.

After stating that “neither order of court, certificate of physicians, nor written application of friends or relatives” is required for getting a patient into the Retreat, and that “the admission rests solely upon the judgment of the superintendent,” Dr. Butler very properly appeals to the Board of Directors to remove the responsibility from him, and place it upon the friends and the attending physician of the patient. Where are the Connecticut lawyers, judges, and legislators, that such a weak point in the barriers of the rights and liberties of the people has thus long remained unguarded?

The remarks of Dr. Butler upon the condition in which patients come to the Retreat close with this passage, which we earnestly commend to the notice and the memory of every physician in general practice: “Others, worse than all, have been brought here by the ill-judged and most pernicious means of deception, the effect of which has been, in every case that ever came under my observation, both annoying to ourselves and detrimental to the poor sufferer.

'How can I believe YOU, sir,' said a gentleman to me, while trying to soothe him, *'when these, MY FRIENDS, have lied to me every mile of my way here?'*"

No apology is required for making the subjoined extract, albeit somewhat longer than we are wont.

"During the six months' vacation which was so kindly granted me by the liberality of your Board, I had the pleasure of being able to visit many of the most prominent lunatic hospitals in England and Scotland. I embrace this opportunity to express my grateful sense of the cordiality and courtesy with which, as the superintendent of one of the oldest lunatic hospitals in the United States, I was everywhere received, and of the frankness and promptitude with which the details of the different institutions were shown. Every door was opened, and every department freely exhibited, evidently giving me the credit of coming to learn the advantages of their institutions, and not to seek for demerits or matters of cavil.

"My reception at some of them was more like that due to an old friend than to a stranger, and was a pleasant recognition of that kindly community of feeling which springs up in every liberalized mind towards those who are fellow-labourers in the same great commonwealth of philanthropy.

"It is evident that, from a variety of causes, a spirit of improvement is pervading these hospitals. A great impetus has of late years been given to this department of human effort, and the most beneficial and gratifying results have been attained.

"It is not expedient, in the narrow limits to which I desire to restrict this report, to go into a consideration of these causes. It is sufficient for my purpose to say that, notwithstanding a few years since our leading institutions were not surpassed by the best of theirs, it is very evident to me that we have now none which will compare with some of those lately erected there. In the older hospitals, there was manifest improvement in the buildings where original defects could never be wholly remedied. In the new institutions, those erected within a very few years, or just now going into operation, I found a beauty of structure, with a thoroughness and perfection of arrangement, which I have never seen equalled elsewhere. Among these it will not, I hope, be invidious to mention the asylums at Prestwich and Cheadle, near Manchester; at Mickleover, near Derby; at Clifton, near York; and the new asylum at Stafford.

"It was evident that in these new asylums no pains nor needful expense had been spared to obtain, in the first place, the most unexceptionable plans. The highest authorities were consulted, and their conclusions referred to the scrutiny of other practical men; the errors of preceding structures were avoided, and every improvement as readily adopted, with the single desire to obtain the best. It is evident that, generally, each succeeding structure contains improvements upon its predecessors. Once adopted, the plans have been carried out without that curtailment and distortion which sometimes, in this country, has produced such unfortunate results. In some instances, it is evident that undue expenditure has been incurred to produce external effect; but in the internal arrangements, especially, it is clear that, while in county asylums everything is plain and simple and unpretending, *that* is deemed in all the best and wisest economy which, in the long run, shall best effect the desired object.

"The chief points of excellence are extensive, well laid out, and carefully-planted airing-courts and pleasure-grounds, and sufficiency of cultivated land for out-of-door employment; spacious, airy, and well ventilated apartments; the extensive application of steam to every available purpose, cooking, pumping, heating, ventilating, &c., and open fire-places in every admissible room. The most important of all are the extensive arrangements made for the manual employment of the inmates both within doors and without. There are workshops for the different trades, in some of which these trades had been successfully taught, and in many the amount of work performed showed that the shops

were sources of profit to the institution, as well as of beneficial employment to the patients.

"Another feature which struck me most pleasantly was the construction, in several hospitals, of a large and handsome room, especially for the social gatherings and amusements of the patients. My attendance at some of these festival occasions is among the most pleasant reminiscences of my visit. A large amount of profitable out-of-door labour is insisted upon in many, and the amount accomplished in some instances is highly creditable. It is very evident that, if the American institutions are to maintain the comparatively high rank to which they have justly heretofore had claim, a more liberal expenditure than has been adopted in most, in regard to occupation both of body and mind, amusement, &c., must be adopted."

4. The movement of the population of the Lunatic Asylum for the Poor of New York City, for 1853, as given in the report by Dr. RANNEY, was as follows:—

	Men.	Women.	Total.
Number of patients, January 1st	226	301	527
Admitted in course of the year	226	261	487
Whole number	452	562	1014
Discharged, including deaths	220	252	472
Remaining, Dec. 31, 1853	232	310	542
Of those discharged, there were cured . . . . .	...	...	271
Died	56	59	115

Of those cured 14 were cases of delirium tremens, 2 of febrile delirium, and 7 were discharged, "recovered," twice each, in course of the year. These being subtracted, the number of cures is 248.

"The ratio of recoveries," remarks Dr. Ranney, "is a little more than 50 per cent. The proportion must depend much upon the length of time the disease has existed previous to admission. Usually the indigent are placed in an asylum earlier than the wealthy. For this, as well as other reasons, the percentage of recoveries in a hospital of this character should be larger than in institutions devoted to the use of the higher classes, provided the means for effective treatment be furnished."

Causes of death:—Consumption 45, chronic diarrhœa 14, paralysie générale 13, congestion of the brain 7, marasmus 6, typhus fever 4, typho-mania 4, paralysis 3, apoplexy 3, dysentery 3, delirium tremens 2, epilepsy 2, chronic pleurisy 2, dropsy 2, suicide 1, accidental drowning 1, pericarditis 1, hæmoptysis 1, inflammation of spinal marrow 1.

"It will be seen that consumption is the most common (cause of death). The prominent symptoms of this disease are usually absent where insanity exists. The patient will frequently walk until near the day of his death, and, if there be any cough, it is often so slight as to escape observation."

Of 3160 patients, who have been received since January, 1, 1847, no less than 2381 were foreigners, and but 779 native Americans. The largest number of natives received in any year was 149, in 1847; the smallest number, 94, in 1853. Of foreigners, the number has increased from 280 in 1847, to 393 in 1853. This is accounted for by the increase of immigration. The leading numbers in the table of nativity for 1853 are as follows:—Ireland 241, Germany 94, England 19, Scotland 10, Switzerland 5, France 4.

"Very few of the indigent insane of this city are sent to the State Asylum at Utica, and none to Flushing, Hudson, or the Bloomingdale Asylum. Either the ratio of insane is very much less among the natives, or they are kept at their homes. Probably the first supposition is true, and this may arise in part from peculiar causes incident to emigration, and in part from the shipment of the insane from Europe during a lucid interval."

Dr. Ranney, as he intimates, has had uncommon advantages for studying

chronic dementia, and he asserts his belief that "by constant training, very many who, if left to themselves, fall into the most miserable condition, would become valuable aids in the asylum, even if perfect recovery did not follow. . . . If there were an important organic lesion of the brain, no great improvement could be expected; but, *from my examination of this organ in a great number of cases, the proportion in which important lesions were found has not been large. The enfeeblement of the mind depends, in many cases, upon the loss of tone, from inaction. . . . After some acute disease has existed, as mania, this organ becomes exhausted, i. e., loses its tone, and can only be restored by nourishment and the proper mental stimulus.*"

These remarks remind us of the case of a man of more than ordinary intellectual capacity, who was more than fifteen years a patient at Bloomingdale, a large part of the time demented. Attacked with typhoid fever, and removed to the New York Hospital, he died. The late Dr. Swett made a *post-mortem* examination, and found in the brain no lesion of importance — absolutely *nothing* whereby to explain the patient's long-continued mental incapacity.

5. In their report for 1853, the Commissioners of the Indiana Hospital for the Insane refer to the resignation of Dr. R. J. Paterson, who had held the office of superintendent from the opening of the institution, and remark that "in his departure he carried with him not only the high esteem of every other officer and attendant of the hospital, but, we trust, of every friend of the unfortunate lunatic in the State." He left on the 1st of June, 1853, and was succeeded by Dr. James S. Athon.

	Men.	Women.	Total.
Patients in the hospital, October 31, 1852	81	78	159
Admitted in course of the year	74	82	156
Whole number	155	160	315
Discharged, including deaths	77	75	152
Remaining, October 31, 1853	78	85	163
Of those discharged, there were cured	47	39	86
Died	7	7	14

"While portions of our country have suffered from disease, the Hospital for the Insane has escaped everything like an epidemic. This immunity from intermittents, remittents, and dysenteries, may be attributed to the favourable location of the institution, and to the prompt and rigid enforcement of the sanitary laws for the government of the establishment."

"Already over two hundred insane are knocking at the door of the hospital for admission, and cannot be received for want of room. The institution is crowded to its utmost capacity." The erection of an additional wing is in prospect.

Two suicides, the first which have occurred in the hospital, took place in the course of the year.

From the remarks by Dr. Athon upon the medical treatment of the insane, we make the following extract:—

"Emetics and purgatives are useful in expelling vitiated matters from the stomach and bowels. Conjoined with proper diet and exercise, they may be made subservient in restoring the natural secretions of the alimentary canal. To attempt to make a lasting and beneficial impression on the system by repeating these remedies beyond their aperient or gently evacuant effect is irrational and highly injurious to the patient. There are too many cases brought to this hospital, exhausted to mere skeletons by the use of the lancet, blisters, and purgatives, to deny, for one moment, this position. By the administration of tonics, and the use of a nutritious diet, a large proportion are restored to physical health. These remarks are made with the hope that our professional brethren who may have charge of patients before sent to the hospital, will keep

in view that the *hypercynosis* system can very rarely, if at all, do good in cases of insanity."

We now come to the report for 1854:—

	Men.	Women.	Total.
Patients in the hospital, October 31, 1853	78	85	163
Admitted in the course of the year	83	86	169
Whole number	161	171	332
Discharged, including deaths	88	84	172
Remaining, October, 31, 1854	73	87	160
Of those discharged, there were cured	59	55	114
Died	5	8	13

Causes of death.—Typho-mania 3, general paralysis 2, maniacal exhaustion 2, pulmonary consumption 2, scrofula 2, tabes mesenterica 1, erysipelas 1.

"Scarcely any other disease," remarks Dr. Athon, "than what is consequent to insanity, has had a place in our wards, although the adjacent country has suffered much from summer and autumnal afflictions."

It is stated in the report of the commissioners that the great per-centage of cures "is, in part, attributable to the selection of patients, receiving those whose insanity is of the most recent date—not filling up the hospital with chronic cases that are hopelessly incurable."

Two festivals were enjoyed by the patients in the course of the year. On May-day "a banquet was given, and the day celebrated with as much parade as is usually manifested upon such an occasion;" and "the second annual celebration, at the hospital, of American independence, was attended, like the first, with the happiest results. Above a hundred patients participated in the festivities of the occasion."

	Men.	Women.	Total.
Patients admitted from Nov. 1, 1849, to Oct. 31, 1854	372	367	739
Discharged, recovered	192	178	370
Died . . . . .	...	...	63

Religious excitement and anxieties is alleged as the cause of the mental alienation in 61 cases, Millerism in 2, and "spiritual rappings" in 29.

"Millerism, in its day," says Dr. Athon, "startled the minds of men and turned them into religious bigots, and thence the transition was easy, in many instances, to insanity. But the spiritual rapping mania eclipses Millerism, or any other *ism*, in its agency to produce aberration of mind. The spiritualists profess to commune with departed spirits, and through their omniscience learn the condition of the dead, look into the future, and do other ridiculous things. This delusion prevails, in some parts of the country, to a most unaccountable extent, and has been prolific, beyond any other one cause, of insanity."

6. The reports from the Illinois State Hospital for the Insane are *biennial*, that which is about to occupy our attention being for the fiscal years ending on the 30th of November, 1853 and 1854.

The former superintendent having left the institution, he was succeeded, in June, 1854, by Dr. ANDREW MCFARLAND, for some years favourably known to our readers as the principal officer of the State Asylum of New Hampshire. The Trustees remark of him that their high expectations in regard to his superior qualifications for the office "have been fully realized."

Patients in the asylum, Dec. 1, 1852	82
Admitted in the two years	265
Whole number	347
Discharged, including deaths	181
Remaining, Dec. 1, 1854	166

"As the hospital affords accommodation for the two sexes equally, and the whole has been occupied the most of the time recently, the number of males and females has been nearly the same."

Of the patients discharged, there were cured . . . 114
Died 21

"The bodily health of the inmates of the hospital has generally been good. No epidemic has at any time prevailed, although during the past summer (1854) the danger seemed somewhat imminent from the frequency of cases of cholera in the vicinity. The instances of mortality have mainly occurred among those exhausted by long-continued mental disease. The fact cannot be questioned that most forms of mental disease shorten the period of human life. In the exceptions to the rule, in all cases of high excitement, it will be found that lucid intervals occur which allow nature to recover itself before the point of exhaustion is reached.

"Epilepsy, palsy, and consumption will annually claim a class of victims in whose temperament certain predispositions exist. But the natural termination of mania, as it usually occurs, is in a form of disease which has eluded the nomenclature of medical writers. It consists in the failure, *seriatim*, of those physical functions whose healthy performance depends upon a normal innervation. [What functions do *not* require normal innervation for normal performance?] The hesitating step and a difficulty of utterance are among the earliest indications that the brain is losing its supremacy. Calorification fails; the extremities become cold, and the individual is found hovering about the registers or other sources of artificial heat. Soon the circulation becomes enfeebled; the face assumes a swollen and stolid appearance; the extremities swell and become purple, especially if in a dependent position. Digestion becomes involved, and emaciation quickly follows. The legs break out with ulcers which soon become the nucleus of extensive sphacelation, and death is welcomed to close the scene. The individual usually sinks before all the stages in this succession of physical decay have been taken. Science has given no name to this disease, whose aspect is familiar to all who treat the associated insane. It is neither palsy, dropsy, nor marasmus, and yet it combines something of each."

Of the 406 patients who have been received at the institution since it was opened, on the 3rd of November, 1851, *only forty-six were natives of Illinois*. The others, so far as known, were immigrants from various States and countries, in the following proportions: New York 47, Kentucky 36, Pennsylvania 35, Ohio 25, Indiana 16, Tennessee 15, N. Carolina 13, Virginia 11, Vermont 7, N. Hampshire 7, N. Jersey 7, Massachusetts 5, Maryland 5, Connecticut 4, Maine 3, Delaware 3, Missouri 2, R. Island 1, Wisconsin 1, Georgia 1. Germany 30, Ireland 25, England 12, Scotland 4, France 3, Sweden 1, Russia 1, Poland 1.

Dr. McFarland thinks that, considering the great proportion of foreigners among the inhabitants of the State, the number of them in the hospital is small. "The Germans," he observes, "are the best, as they are the most numerous, of our foreign patients. They possess a healthy and elastic mental constitution; they are docile and affectionate under treatment, and grateful when they recover."

We know that for many years there has been some discrepancy of opinion among the superintending physicians of our institutions for the insane, in regard to the utility of a committee, such as is mentioned in the subjoined extract; and we rejoice that Dr. M. has found it to work so favourably:—

"Another feature in the experience of the hospital for the past year, too interesting and too important to be passed without notice, is the formation, on the part of the ladies of Jacksonville, of a benevolent association, having for its

express object a regular and stated visit to the institution on the Saturday of each week, by a committee assigned in rotation. This society, appropriately styled 'The Dix Association,' we regard as a conception of the most happy kind, and its operations have been peculiarly promotive of the welfare and happiness of the unfortunate persons for whose benefit it was instituted. We earnestly hope that the zeal and faith of the society may be sustained, fully believing that its formation is an important era in the history of the institution."

The original plan of the buildings of the hospital at Jacksonville consisted of a central building and four wings, with accommodations for about four hundred patients. But two of the wings have been erected. These furnish apartments for but 168 patients, and the hospital is so much crowded that parlours are being converted into dormitories, undoubtedly to the detriment of the establishment. The question now is, whether the primary design shall be carried out, or a new hospital established in another portion of the State. The Association of Physicians to American Institutions for the Insane have deprecated hospitals intended for more than 250 patients, yet Dr. McFarland advocates the enlargement of that at Jacksonville, by the addition of the formerly contemplated wings, and alleges the reasons therefore, expressing his belief that the special circumstances render this institution an exception to the general rule.

7. The second biennial report of the Trustees and Superintendent of the Missouri State Lunatic Asylum is the first which has reached us from that institution. We have no information in regard to the precise time at which the establishment was opened, nor any detailed description of it. It appears that it contains seventy-two rooms, each designed for one patient; that it is being enlarged, so as to accommodate about seventy more; and that it is under the superintendence of Dr. T. R. H. SMITH. During most of the period embraced by this report it has been over-crowded with patients, the "usual average" number having been "about one hundred;" and over seventy applications for admission have been rejected.

	Men.	Women.	Total.
Patients in the Asylum, Nov. 29, 1852	34	28	62
Admitted in course of two years	68	55	123
Whole number	102	83	185
Discharged, including deaths	49	42	91
Remaining, Nov. 27, 1854	53	41	94
Of those discharged, there were cured	20	23	43
Died	22	16	38

Causes of Death.—Epilepsy, 11; consumption, 6; chronic diarrhoea, 4; typhoid fever, 4; "ulceration of bowels," 3; paralysis, 2; "disease of heart," 2; inflammation of bowels, 2; ascites, 1; accidental burn, 1; "abscesses and gangrenous ulcers at time of admission," 1; exhaustion, 1.

"The general health of our household has been very good, excepting during the past season (1854). The intensely warm weather which continued during the summer months, in connexion with the unparalleled drought, produced an unusual amount of sickness among our patients. The citizens of Fulton, whose healthfulness, heretofore, has been proverbial throughout the State, also suffered greatly from dysentery. The prevailing disease with us was diarrhoea, with a few cases of dysentery and typhoid fever. The attacks were generally very violent in their character, and all of a typhoid type. The fatality, the number of cases considered, could not be regarded otherwise than small."

Dr. Smith, in explaining the apparently, the *really* large mortality, says:—"The patients received into this institution, when first opened, and until filled to its entire capacity, with a few exceptions, were those of long standing, who

had been accumulating for many years in consequence of the want of provision for their proper treatment. A large number of these were also labouring under incurable diseases associated with their insanity." Such, or similar, has been the experience at a very considerable number of our institutions, and Dr. Smith is not the first who, at the opening of an asylum, has seen a large number of his patients succumb within the first few months.

Of the epileptics, "the majority died during convulsions, and the remainder gradually sunk under the exhausting influence of repeated attacks." The death from "accidental burn," was that of Theodore McGready, "an idiotic boy, admitted in accordance with a special act of the last Legislature. . . . A few weeks before the accident, the weather becoming cold, and in consequence of the unfinished condition of our steam heating apparatus, we were forced to take all our patients from the halls into the stove-rooms in the centre building, to prevent them from suffering. . . . Early in the morning of the day of this sad occurrence, the attendant took Theodore into the stove-room first, and returned for other patients, expecting to be absent only a minute or two. After reaching the hall, he heard him crying, ran immediately to the room, and, upon entering, to his great astonishment, found his clothes on fire. He made every effort to extinguish it, but before it could be done the burn was very severe, extending over his abdomen, his sides, between the lower extremities, the fore-arms and hands. . . . He received every attention in our power, through the day and night, but the constitutional irritation was so great that he died the next morning, about twenty hours after receiving the burn. . . . The manner in which our building is now heated (by steam) precludes the possibility of another such accident."

Whole number of patients since opening of Asylum	. . .	193
Married 81, single 100, widows 9, widowers 3	. . .	193

Insanity commenced between 20 and 30 years of age in 81; between 30 and 40 in 51. Among the assigned causes of the insanity of the patients are:—Miasmatic fevers, 25; spiritual rappings, 4.

The moral treatment pursued at this asylum is similar to that of other American institutions of the kind, and is already so fully understood as to require no further description in this place. A chapel has been constructed, and a library of 500 volumes collected by gratuitous contribution.

In his discussion of the causes of mental disorders, Dr. Smith makes the following observations:—

"It has been a source of astonishment to many that insanity should prevail to so great an extent in this highly-favoured land of ours, and seems to be increasing even in a greater ratio than our population, and is, perhaps, of more frequent occurrence in this than in most other countries of the world. The general impression is that our happy form of government . . . would be incompatible with its prevalence, at least to any great extent. It is true, the elements which enter into the composition of our government, in the abstract, seem well calculated to contribute to man's highest and best interests; yet the freedom of thought and action possessed by every individual connected with this highly-favoured state of things, the high degree of excitement incident to the different pursuits of life; the spirit of emulation; the hopes, the fears, the joys, the sorrows brought into exercise in quick succession—all tend, in a striking manner, to disturb the equilibrium so essential to the healthy action of the mental faculties; and by a repetition of the same excesses of feeling, this governing and protecting principle is lost, disease developed, and the mind in ruins one of the sad and fearful results. Is not the conclusion, therefore, justifiable, that our form of government, with the habits of our people, is calculated to increase rather than diminish the frequency of insanity, especially when we reflect that the causes referred to are acting upon ill-balanced minds

and misproportioned characters, the effects of inefficiency of the intellectual and moral powers with those not favoured with good opportunities in early life, and their misdirection with those who enjoyed better advantages.

"The great practical question, then, is, What must be done in this, our happy country, already the hope and admiration of the world, to prevent, in the midst of so many exciting causes, the most terrible of all afflictions? The answer is, ample provision for, and a radical reform in, the early education of the rising generation; or, in other words, the more careful and philosophical cultivation of the intellectual and moral faculties and propensities of all, in harmony with a correct physical education. Inefficient and misdirected early education constitutes the great predisposing cause to crime as well as insanity; sad combination truly. The statistics of all hospitals for the insane prove that the great majority of the cases of insanity occur between the ages of fifteen and thirty, and the statistics of crime give us nearly the same results."

We are but little disposed to differ from our friend, Dr. Smith, in the really essential parts of this extract; but we must venture to propose some of the thoughts suggested by the perusal of it. The island of Malta was, by nature, a single mass of rock, almost wholly destitute of vegetation and of soil. Yet the Maltese boasts of his home as "The flower of the world." The Neapolitan exclaims, "See Naples and die!" (there being nothing more beautiful to be seen.) They of the country of Confucius, who claim that theirs is the "Celestial Empire," say "We have two eyes, the Europeans have one, and all the other inhabitants of the world are blind." We smile at the simplicity of the Maltese, we do not esteem Naples so much of a paradise as to be willing to die the moment we have seen it, and our people are not so much enamoured with the ocular advantages of the Chinese as to prevent a disposition to expel them from the country. Now let the impartial statesman, or jurist, or philanthropist, read the first of the two paragraphs quoted, and would he be so thoroughly convinced of our happiness, as a people, that, in the fulness of his heart, he would reiterate our expression to that effect, almost at the very beginning of the second? or would he rather pause to reflect whether, after all, we are so *truly* happy as we claim to be? We will not anticipate the decision of the question; for, most certainly, if we are not a people among the happiest in the world, it is not in default of as great a proportion of the means or elements of happiness as has ever fallen to the lot of any nation. Do we employ those means wisely? Do we combine those elements with the skill which is suggested and produced by a profound and just philosophy? Lord Morpeth, now the Earl of Carlisle, after his tour through the United States, declared it as his opinion that no other people on earth possess so many of the comforts of life as the Americans, and among none is there so little happiness.—Dr. PLINY EARLE. From the "American Journal of Medical Science" (July).

CEREBRAL PATHOLOGY BASED UPON THE EXAMINATION OF 411 CASES. SPECIFIC GRAVITY OF THE BRAIN IN CASES OF INSANITY.

BY DAVID SKAE, M.D.,

Physician to the Royal Edinburgh Asylum for the Insane, &c., &c.

WE are glad of an opportunity of transferring to our pages the following valuable communication of Dr. Skae, published in the Annual Report of the *Royal Edinburgh Asylum* for 1854. It refers to a subject

of deep and increasing interest. We regret that want of space compels us to omit the tables illustrative of Dr. Skae's experiments in connexion with the comparative weights of the brain in the various forms of mental disease, as well as other tabular matter, showing the specific gravity of the grey and white substance of the brain in the sane and the insane. We, however, give all the results at which he has arrived in relation to both branches of inquiry.

Post-mortem examinations were permitted in 41 cases. They were made with much care, and the following are the results :—

Of those examined, 3 had been cases of acute mania, 15 of dementia, 5 of dementia with epilepsy, 3 of melancholia, 9 of monomania, and 6 of general paralysis.

Calvarium was of *unusual thickness* in 6 cases; 1 of acute dementia, 1 of dementia, 3 of dementia with epilepsy, and 1 of melancholia.

Calvarium was *thinner than usual* in 9 cases; 2 of melancholia, 1 of dementia, 4 of monomania, and 2 of general paralysis.

Diploe was *absent* in 2 cases of monomania.

Abnormal adhesion of dura mater to calvarium existed in 4 cases; 1 of dementia with epilepsy, 2 of monomania, and 1 of general paralysis.

Pus in the cranial sinuses was found in 2 cases; 1 of dementia with epilepsy, and 1 of acute dementia; in the latter case, *pus* was also found in the internal ear, and *sero-purulent effusion* beneath the arachnoid, and in the lateral ventricles.

Increased thickness of dura mater was found in 3 cases; 1 of acute mania, 1 of acute dementia, and 1 of dementia with epilepsy.

Thinness of dura mater was noticed in five cases; 2 of dementia, and 3 of monomania.

Ossific deposit in falx cerebri existed in 1 case of monomania.

Abnormal adhesion of arachnoid to dura mater was found in 4 cases; 1 of acute dementia, 1 of dementia with epilepsy, 1 of monomania, and 1 of general paralysis.

Serous effusion into sac of arachnoid existed in 22 cases; 1 of acute dementia, 8 of dementia, 2 of dementia with epilepsy, 5 of monomania, and 6 of general paralysis.

Extravasation of blood into sac of arachnoid was found in 2 cases of general paralysis.

Organised lymph in sac of arachnoid was found in 1 case of general paralysis.

Opacity and thickening of arachnoid was found in 26 cases; 1 of acute mania, 2 of acute dementia, 7 of dementia, 6 of dementia with epilepsy, 2 of melancholia, 4 of monomania, and 4 of general paralysis.

Granular deposit in arachnoid over general surface was noticed in 2 cases of general paralysis.

Congestion of membranes was noticed in 12 cases; 1 of acute mania, 3 of dementia, 1 of acute dementia, 2 of dementia with epilepsy, 1 of monomania, and 4 of general paralysis.

Sub-arachnoid serous effusion was found in 22 cases; 1 of acute mania, 1 of acute dementia, 6 of dementia, 2 of dementia with epilepsy, 6 of monomania, and 6 of general paralysis.

Sub-arachnoid sero-sanguinolent effusion occurred in 1 case of dementia with epilepsy.

Adhesion of membranes to cortical substance was found in 3 cases of general paralysis.

Paleness of the grey matter was noticed in 17 cases; 2 of melancholia, 6 of dementia, 1 of acute dementia, 6 of monomania, and 2 of general paralysis.

Grey matter was of a *dark tint* in 3 cases; 1 of dementia with epilepsy, 1 of dementia, and 1 of melancholia.

Grey matter had a violaceous tinge in 5 cases; 1 of acute mania, 1 of dementia with epilepsy, 1 of monomania, and 2 of general paralysis.

Grey matter had a yellow tint in 2 cases; 1 of acute mania, and 1 of general paralysis.

Grey matter was softened in 2 cases; 1 of dementia, and 1 of general paralysis.

Grey matter presented limited yellow softening in 3 cases; 2 of dementia with epilepsy, and 1 of general paralysis.

White matter was softened in 2 cases: 1 of dementia, and 1 of general paralysis.

Punctæ vasculosæ were very numerous in 15 cases; 1 of acute dementia, 2 of dementia, 5 of dementia with epilepsy, 1 of melancholia, 2 of monomania, and 4 of general paralysis.

Apoplectic effusion was found in 1 case of monomania.

Serous effusion into lateral ventricles was found in 16 cases; 2 of acute mania, 1 of melancholia, 5 of dementia, 2 of dementia with epilepsy, 2 of monomania, and 4 of general paralysis.

Sero-sanguinolent effusion into lateral ventricles occurred in 1 case of acute dementia.

Granular deposit in membrane of lateral ventricles was found in 3 cases; 1 of dementia with epilepsy, and 2 of general paralysis.

Cystic bodies in choroid plexuses occurred in 9 cases; 1 of acute mania, 1 of dementia with epilepsy, 4 of monomania, and 3 of general paralysis.

Pineal body was unusually large in 4 cases of dementia.

Veins of Galen were much dilated and clogged with decolorized clots in 1 case of dementia with epilepsy.

The brain was carefully weighed in every case, and the weights, with those of other viscera, together with the specific gravity of the grey and white matter of the brain are recorded.

The general conclusions to be derived from the preceding abstract are, that, in a large proportion of the deaths, well-marked appearances were found indicating increased vascular action, or slow inflammatory processes affecting the membranes of the brain, and producing thickening and serous effusions. These appearances were most constant and most distinct in the deaths from general paralysis, where there was also found a peculiar kind of *softening of the grey substance* of the brain, and on examining this part of the brain under the microscope, the cells of which it is principally composed appeared to be enlarged and altered in form. In these cases, *adhesion* of the membranes to the surface of the convolutions was present in all instances where there was not such a quantity of serous effusion interposed as to prevent it; in stripping off the membranes, small layers of grey matter were stripped off with them, particularly on the lateral surfaces of the hemispheres.

With the exception of the morbid changes last mentioned, which are limited to cases of general paralysis, all the other morbid appearances are found very frequently in the brains of persons who have died of other diseases, and without any mental affection. And, on the other hand, cases are not unfrequently to be met with in the dead-house of the Asylum, of patients who had exhibited, during life—for many months or even years—all the symptoms of raving madness, and in whose brains the morbid appearances described are altogether wanting, and in which the brain could not be distinguished from that of one who had died in all the vigour of a sound mind.

From these facts it must be inferred that the morbid appearances described, although the very frequent concomitants of insanity, do not constitute the pathological conditions by which the symptoms of mental derangement are produced; and that we are, in fact, ignorant of the true pathology of this disease.

There are many considerations which may well lead us to doubt whether any other morbid changes in the structure of the brain may ever be discoverable in insanity. The analogy of the symptoms to those produced by poisons which are known to enter the blood, the suddenness of the invasion in some cases, and the suddenness of the cure in others, even occasionally of long standing, the remarkable remissions, and at times the temporary restoration for a few hours or moments, to perfect sanity in persons long plunged in profound dementia, or labouring under a chronic and protracted mania, are facts which lead to the reflection that insanity may be a disease of the blood, or may depend upon a peculiar orgasm of the nervous centres,—upon conditions not to be discovered in the brain after death.

Pathological investigations, however, for changes in the nervous substance itself, are not to be abandoned until we have exhausted all our means of observation; and it occurred to me, accordingly, some years ago, to commence a series of experiments by collecting the *weights* of the brain, cerebrum and cerebellum,—by measuring the *breadths* of the *grey matter*,—by endeavouring to determine the degree of *hardness or softness* of the cerebral substance, by ascertaining by what length of a column of water it could be broken up,—and, more lately, by taking the *specific gravity* of the grey and white substance of different parts of the brain.

In an hospital for the insane, where the deaths are much fewer than in a large general hospital, it takes some years before a sufficient number of data can be accumulated to warrant any general inferences; and I feel that the data which I possess, although the accumulation of some years, are still rather meagre. I am induced, however, to record them, as offering a few very interesting suggestions, which may lead others to follow similar methods of observation, and thus facilitate the collection of a larger number of facts.

My measurements of the grey matter, and experiments on the hardness and softness of the cerebral substance, I do not propose to detail at present, as I have no similar observations on the brains of persons dying sane with which to compare them. I shall confine myself, therefore, to the *weight* and *specific gravity* of the brain, and to such general deductions only from those observations as the number of facts seem to warrant. I shall leave for another opportunity several comparisons and inquiries which might be instituted through these methods, inasmuch as the data seem to me too few to justify speculations which relate to more special questions.

I have compared my observations on the weights of the brain with those collected in the Royal Infirmary of Edinburgh by the late Dr. John Reid and Dr. Peacock, and the experiments on its specific gravity with those published by Dr. Sankey in the "British and Foreign Medico-Chirurgical Review," for January, 1853 (vol. xi., p. 240), and made in the Royal London Fever Hospital. The weights used were avoirdupois.

The observations made of the weights of the brain comprise 199 cases, of which 98 were males and 101 females. The tables exhibit the weights of the heaviest and lightest encephalon, cerebrum, and cerebellum (with the pons and medulla), and their average weights at different periods of life. The figures are arranged in parallel columns with those of the corresponding results from the tables of Drs. Reid and Peacock.

On comparing the columns showing the heaviest brains in the sane and insane *males*, it will be seen that in only one instance did the encephalon exceed 60 ounces in the insane, while in several of the sane it amounted to 62 ounces and up-

wards, the heaviest brain in the one series being 60 oz. 8 dr., and the heaviest in the other being 62 oz. 12 dr. It will also be seen that, with two exceptions, the superiority in weight was among the brains of the sane in each of the quinquennial or decennial periods into which they are classified. Whether this justifies the inference that persons having large brains are less frequently the subject of mental derangement than others, I shall not venture to say; but the fact is a striking one when contrasted with the results derived from a comparison of the average weight of the entire number of cases, where it appears that the average weight is increased in persons dying insane. The average weight in the insane from fifteen to ninety years of age being 50 oz. 2 dr., and in the sane 49 oz. 14 dr.

Different results are derived from a comparison of the weights of the brains of the *females*; here, in one exceptional case, the brain weighed 61½ ounces in a female who died insane, but in a majority of cases the greatest weight was on the side of the sane. On taking the average of all the cases, the weight of the brain in the insane was 44 oz. only, and in the sane 44 oz. 5 dr.

The comparison, however, establishes, I think, a strong presumption that the absolute weight of the brain is increased in the insane, when we reflect that in many cases of insanity, the absolute *size* of the brain must be materially diminished by the large quantity of serous effusion found in the ventricles, arachnoid sac, and sub-arachnoid tissue.

This increase in weight, however, appears to depend chiefly upon an increase in the weight of the *cerebellum*; for, on comparing the weight of the cerebra in the two series of cases, it will be found that the difference is inconsiderable, and indeed in the case of the females that it is in favour of the sane. On comparing, however, the columns showing the weight of the cerebellum (with the pons and medulla) in the two classes, it will be found that there is almost a uniform preponderance in the weights of those of the insane. The average weight in all the cases of the insane males exceeds that of the sane by 4 drachms, and in the females by 5 drachms.

In a Table the ratio between the cerebellum (with the pons and medulla) and the cerebrum is given at the different ages distinguished. Here the same fact is very clearly brought out; in almost every instance the cerebellum in the insane being heavier in relation to the cerebrum than it is in the sane. From the average of the entire number, the cerebellum was found in the males to be as 1 to 6·748 in the insane, and as 1 to 7·06 in the sane; and in the females as 1 to 6·64 in the insane, and only 1 to 7 in the sane. The cerebellum therefore is considerably heavier in relation to the cerebrum in the insane.

This mode of estimating the results appears to me to be free from the source of fallacy arising from the small number of cases compared; when we compare the absolute weights together, as here, on examining all the cases separately, we find, in almost every instance, the cerebellum of each brain heavier in relation to its own cerebrum in the insane than in the sane.

Further inquiries, and a larger number of data, may modify these results; but, I think, from those which I have thus collected, it may be regarded as highly probable that there is *an increase in the weight of the cerebellum in persons dying insane*.

In mania, the average weight of the encephalon in males was 53 oz. 13½ dr.; in monomania, 52 oz. 11½ dr.; in dementia, 49 oz. 11½ dr.; and in general paralysis 46 oz. 6½ dr.; the weight being greatest in mania, and least in general paralysis. In comparing the average weights of the cerebella, &c., however, in the same series, while they are found to follow the same decrease from mania, the highest, through monomania to dementia, the weights being respectively 6 oz. 12 dr., 6 oz. 11½ dr., and 6 oz. 9½ dr.; the cases of general paralysis present

the highest average, the average weight being 6 oz. $13\frac{1}{3}$ dr. From the fact that in general paralysis the morbid appearances are most constant and most distinctly marked, this result might perhaps be anticipated, if we assume what I have endeavoured to show, that the relative weight of the cerebellum to the cerebrum is increased by insanity, and that the cerebellum is the organ principally affected. This increase, too, would appear from a review of the history of the case to bear a constant relation to the form of the disease, and to be greatest in more protracted and gravest cases. On comparing the average weight of the cerebellum to that of the cerebrum in the cases classified as above, it was found in males to be as 1 to 6.9735, 6.7549, 6.5625, and 6.2511, in mania, monomania, dementia, and general paralysis respectively. Excepting mania, the same gradual increase in the relative weight of the cerebellum was found to obtain in the females, the cerebellum being to the cerebrum in them as 1 to 6.5338, 6.412, 6.5943, and 6.0435 in same class of cases respectively.

It appears, therefore, that in cases of comparatively short duration, there is the smallest amount of increase in the relative weight of the cerebellum, and that in general paralysis the greatest increase takes place.

In reflecting upon these results, the impaired control over the voluntary movements, which forms so marked a feature of general paralysis, and the very constant increase of the relative weight of the cerebellum in this disease, must at once be viewed as very interesting and important facts in connexion with the functions ascribed to the cerebellum by Fleurens and other physiologists.

May it not be asked—supposing it to be established by an extended series of observations, that there is uniformly an increase in the relative weight (and specific gravity, as we shall presently see,) of the cerebellum as compared with the cerebrum in all forms of insanity—whether it may not be inferred that the cerebellum is the organ through which we exercise self-control,—control over the volitions and successions of our thoughts, as well as over the voluntary muscular movements;—a perturbed volition or a loss of self-control, being of all other symptoms the most essential characteristic and pathognomonic feature of insanity?

The specific gravity of the *grey* and *white* substance of the brain was taken in 80 cases, of which 39 were males and 41 females.

The specific gravity in the cases of insanity was almost uniformly higher, and this observation applies to both the *grey* and *white* matter.

In Dr. Sankey's cases, the lowest specific gravity of the *grey* matter was 1028, in the Asylum ones the lowest was 1030; the highest in Dr. Sankey's cases was 1046, in mine 1049; while the average specific gravity in all the cases of both sexes was in the former 1034, and in the latter 1038, showing an increase in the specific gravity in the cases of insanity.

The lowest specific gravity of the medullary substance in the healthy brains was 1032, in the diseased 1032; the highest in the healthy was 1048, in the diseased 1053; the mean of all the cases was 1.0411 in the sane, and 1.0429 in the insane, showing an increase in the specific gravity of the *white* matter of the brain in cases of insanity.

These results are corroborative of those obtained by Dr. Sankey in his observations at the London Fever Hospital, where in all the cases complicated with cerebral symptoms of a grave character preceding death, such as convulsions, strabismus, paralysis, and utter unconsciousness, the specific gravity was high, averaging both in the *grey* and *white* matter 1041. He makes two exceptions in regard to the *white* matter, in both of which the specific gravity was below the mean; these were both cases of children of eight and ten years of age, and both of tubercular meningitis. Deducting these cases, the average specific

gravity of the white matter in his series of cases, complicated with cerebral symptoms, was 1043.

On examining my cases in detail, I find that in most of those cases where the specific gravity of the grey matter was considerably below the mean, the patients had died of phthisis, and in other instances of exhaustion occurring at an advanced age. Where exceptions to this general inference were met with, it was found that either the symptoms immediately preceding death were of a grave character, or that the morbid appearance found in the membrane indicated chronic inflammatory action.

I have also taken the specific gravity of the grey and white matter of the cerebellum in forty-three cases. I have placed on the table the averages at different ages. The number of observations is too few to warrant more than a presumption that the specific gravity of the cerebellum is higher than that of the cerebrum. The difference is much more apparent when, instead of comparing averages, the specific gravity of the cerebellum is compared with that of the cerebrum to which it belonged.

I have not been able as yet to obtain a sufficient number of data showing the specific gravity of the cerebellum in the sane to furnish comparisons with the observations I have made. Dr. Sankey has kindly furnished me with a number of observations made by him; but as he has not separated the grey from the white matter, but has taken his specific gravity from a portion of brain containing both, I cannot compare my observations with his directly. I may state, however, that they tend to the same general conclusion, that the specific gravity of the cerebellum is higher than that of the cerebrum, and that it is so in healthy brains as well as in diseased ones, although probably in a smaller ratio.

Through the kindness of Dr. Haldane, I have been enabled to make a few observations on the specific gravity of the grey and white matter of the cerebellum in persons dying in the Royal Infirmary. The number of cases suitable for a comparison of this kind of cases dying without any cerebral symptoms, has as yet been rather too small to merit a special record. I may, however, state that in a series of five cases of males dying without cerebral symptoms, the average specific gravity of the grey substances of the cerebellum was 1042, that of the cerebrum being 1041. In the cases of the insane examined by me, the average was 1040 for the cerebellum, and 1035 only for the cerebrum, showing a much greater increase in the ratio in the insane than in the sane, although the absolute specific gravity was less in these particular cases.

The white substance of the cerebellum in the five cases referred to, had an average specific gravity of 1.0443, while that of the cerebrum was 1.0430. In the cases examined in the Asylum, the average specific gravity of the white substance of the cerebellum was 1.044, while that of the white substance of the cerebrum in the same cases was 1.039 only—thus showing a small increase in the absolute specific gravity of the white substance of the cerebellum in the insane in the cases compared, and a very considerable increase in the relative specific gravity to that of the cerebrum in the case of the insane.

From these data, although limited, I infer that the specific gravity of the cerebellum is increased in insanity, and attains a greater increase in relation to that of the cerebrum than it does in persons dying sane.

In comparing the specific gravity in the different forms of mental disease, and taking the average of all the cases of each kind, I find the lowest specific gravity of the grey matter to occur in cases of dementia, where, however, it is still 0.003 above the average in the sane. The next highest specific gravity occurs in cases of melancholy and monomania, the next in general paralysis, the next in mania, and the highest in epilepsy.

Of the white substance, the lowest average of specific gravity occurred in

cases of mania, 1040; the next in dementia, 1041; the next highest in general paralysis, the next in monomania, 1044; and the highest also in epilepsy, being 10458.

The results of the preceding observations are curious and interesting. They are inferences certainly from a comparatively limited number of data; but they are, I think, sufficient to prove that more extended observations of a similar kind may probably lead to some satisfactory and important deductions regarding the pathology of insanity and the functions of the brain.

In conclusion, I think it right to state, that the specific gravity of the central substance was taken exactly in the same manner as that followed by Dr. Sankey. A number of jars were prepared with solutions of common salt, the density of which was determined by the urinometer. A series was prepared, ranging from 1.030 up to 1.050. Small portions of cerebral matter were dropped into these solutions, until a jar was found in which the portion so dropped floated midway, at the point of which it sank. This fluid gave the specific gravity, and to insure accuracy, and avoid fallacies arising from the spontaneous evaporation of the fluid, the specific of the fluid was in every experiment tested afresh by the urinometer at the time of the observation. The temperature of the room was 60° F. It is right to repeat the precaution pointed out by Dr. Sankey, namely, to take the first effect of the experiment, and that only; as by allowing the portion of brain to remain a few minutes only in the solution, its specific gravity rapidly alters by endosmose, and it will soon sink even in the strongest solutions. From not attending to this precaution, it is, I presume, to be explained why, in the pathological report lately published of a Metropolitan Asylum, the brain is stated in many cases to have had a specific gravity of 1.090 and upwards!

PRIVATE LUNATIC ASYLUMS IN IRELAND.*

THE number of private asylums in operation at present is the same as mentioned in our last Report; the lunatics, however, have increased by thirty-six, a circumstance corroborative of a fact which our experience in public institutions fully bears out, that insanity is not on the decline in this country, proportionate with the reduction in the general population.

The improvements observable from year to year, since the passing of the Act, afford the strongest proof of the foresight and wisdom of the Legislature in thus particularizing the duties of the inspectors, and giving them the authority of an Act of Parliament to enter into details, and the mode of conducting these establishments, as also to correct any abuses or irregularities they may find to exist in them.

At the date of our First Annual Report, which was made in the year 1843, twelve months after the passing of the 5th and 6th Victoria, the patients confined in private licensed asylums amounted to 373, of whom 161 were males, and 212 females. From that period up to the present they have been annually increasing, there being under treatment on the 1st January, 1855, 459, viz., 252 males, and 207 females; showing an increase of eighty-six lunatics, or twenty-three per cent. on the number under treatment a year after the Act had come into operation.

The most remarkable feature in the above statement is the variation in the proportion of the sexes, the females having exceeded the males in 1843 by fifty-one, and the males exceeding the females in 1854 by forty-five. This

* From the "Seventh Report of the Inspectors of Irish Asylums for the Insane."

variation we find, by reference to the registry kept in our office, is owing to the circumstance that immediately after the passing of the Act, a far greater number of aged females, labouring under chronic lunacy, than of males, were sent to the various private asylums, their friends being desirous, when an opportunity occurred, to place them in establishments where more comfort and attention could be secured to them than in their own houses.

In the course of ten years, as might be reasonably expected, many of these parties died, and hence the present comparative diminution in the numbers of that sex.

Of the 459 patients under treatment at the date of our returns, 132 are set down as curable, and 281, exclusive of forty-six idiots and epileptics, as probably incurable. Of those, however, designated in their certificates of admission as "probably incurable," we have found by experience, from the improved system of treatment now adopted—mildness and judicious management (with constant care and vigilance on the part of the attendants) having superseded mechanical restraint and a less solicitous regard to the feelings and comforts of these afflicted persons—that many become so far relieved as to be enabled to return to their families, and although with impaired understandings, yet capable, to a certain extent, of enjoying the pleasures of their domestic circles, a degree of recovery that scarcely ever was attained under the old system by the class of lunatics in question.

The idiotic and epileptic patients bear but a small proportion to the aggregate numbers in private asylums, the former being only thirty-six, viz., twenty-two males, and fourteen females; the latter ten, of whom one only is a female.

Having investigated into the history of lunacy as regards certain families, from our personal knowledge of the members affected by it in asylums, we would refer to continued intermarriages, and direct hereditary predisposition, no inconsiderable amount of the cases that have come under our observation, the malady frequently developing itself in the third and fourth generation, and, what may appear extraordinary, leaving the second unaffected.

Generally speaking, when such predisposition exists amongst the immediate or exciting causes, whether physical or moral, none will be found more prevalent than intemperance and dissipation; so intimately, indeed, in many cases, is a love of drinking associated with insanity, that it often becomes most difficult to decide whether it be a symptom or merely a result of the disorder. The official management of patients labouring under depraved moral affections is attended with difficulty, and needs much discretion on our part, from the plausibility of the arguments they adduce when under restraint, and the injustice of which they complain at being unnecessarily deprived of liberty, or more truly speaking, of the opportunity to indulge in a reckless dissipation. A majority of the relaxed cases sent to private asylums, and composed of the classes in question, is for the most part carried off by repeated attacks of paralysis.

Of those under treatment on the 1st of January, nearly one half—223 patients—were of mature age, or from forty to sixty years; 152 from twenty to forty; and only five persons under twenty; the remainder being all advanced in life, or over sixty. With reference to this return, it may be stated that early in life, and more particularly when curative treatment is had recourse to on the first appearance of the malady, the mental faculties are more susceptible, and yield more easily to moral and medical influences; so that it frequently happens, under these favourable circumstances, that a few months are sufficient, if not to establish a cure, to afford, at least, well-founded anticipations of ultimate recovery. On the other hand, when the friends of lunatics, from mistaken kindness and motives of delicacy neglect for a long time to place them in an asylum, or to pursue a judicious line of management in their regard, or, above all, when insanity is developed late in life, the probability of recovery becomes slight indeed; the mental, like the cor-

poreal faculties, possessing in advanced age less recuperative powers. Thus the disproportion just referred to may be fairly accounted for.

According to a synopsis of the general social condition of patients, it appeared that the unmarried predominated to a very large extent, there being 354 single or unmarried, and 105 married—majority of unmarried, 249; in the two preceding years it was 253 and 241 respectively, thus showing a uniformity of scale on this head.

With regard to occupations, professions, &c., there is no material alteration, on the whole, since the date of our last public Report in 1853.

It may be worthy of mention, however, in reference to particular professions, that the number of insane persons belonging to the army and navy is about the same now as in 1843; being in 1843—army, 23; navy, 3. In 1854—army, 25; navy, 3; while the number belonging to the church has increased over threefold, viz., from 6 to 19; to the law, twofold—from 9 to 18 (being an average of 1 insane person in every 220 of these two professions, respectively, that of the general population being estimated at about 1 in every 750); of the medical profession, during the same period, from 4 to 6; students of all classes, 6 to 15. Those under the heading "No Occupation" are mainly comprised of females and persons of independent fortune.

During the two years there were 94 patients discharged cured, which reaches 34 per cent. on the admissions; relieved, 55; incurable, 13; died, 45.

Among the deaths, we regret to report the occurrence of one case by suicide, that of an unmarried lady, Miss J——, aged 43, who was admitted into the asylum on the 31st May, labouring under a violent attack of mania. From the evidence given on the inquest, held by the coroner for the county, it appeared that injunctions had been given to the servant in whose charge the lunatic was placed, not to leave her for a moment until she was relieved by some other nurse or attendant. Four days after admission, she having, as she stated in her evidence, other duties to perform, left the lunatic alone, trusting to a strait waistcoat which she put on (without the knowledge of the superintendent) for security. Returning shortly after, she found Miss J—— suspended from the rail of her bed by the cord or lace of the strait waistcoat, of which she had, by some means not accounted for, managed to divest herself. Life at the time was quite extinct. A minute inquiry took place at the inquest, in presence of the brothers of the deceased lady, who felt satisfied that no blame lay with the proprietor; as, had the attendant strictly adhered to the instructions which she admitted had been issued, the unfortunate occurrence could not have taken place. A verdict in accordance with the facts was found by the jury.

Under all the circumstances connected with the foregoing accident, the only course that presented itself, and which was immediately acted upon by directions from this office, was to dismiss the attendant, and impress upon the others, from the example before them, the great responsibility under which they lie, to pay implicit obedience to the instructions they receive, and the serious consequences that may, at any moment, follow a neglect of duty.

Having occasion to animadvert, in the year 1853, on the state of a private asylum, we recommended the magistrates at quarter sessions in the October of that year to give a conditional licence only. At the last October sessions, one of the inspectors attended at the request of the justices, when the chairman intimated to the various proprietors their determination not to grant a licence for any private asylum in future, without the full approbation of the inspectors as to its management in every detail.

The licences, orders for admission, and medical certificates, notices of discharges, and deaths, &c., with two exceptions, have been generally correct, save in some minor points, not necessary to notice in a report to your Excellency, but which points we have not omitted to observe upon to the parties them-

selves—a strict adherence both to the spirit and letter of the Act of Parliament being required by us.

The first exception occurred in an establishment in the County Limerick, the proprietor having failed to apply for a renewal of his licence. We felt it our duty immediately to notify the fact to the Clerk of the Peace, for the information of the magistrates at quarter sessions: subsequently, however, being assured that the omission was not intended as an evasion of the law, and on the party undertaking to lodge an application for a fresh licence, to be taken into consideration at the quarter sessions next ensuing, and paying the full amount of fees for which he was liable in the first instance, we did not deem it necessary to interfere further.

The second case was that of a medical gentleman, under whose care we discovered three idiotic patients. Having satisfied us that he acted from ignorance of the law in receiving them without due authority, we forebore to institute those legal proceedings which otherwise it would have been our duty to follow up. Finding his house, however, on inspection, to be well suited for the reception of ten patients, we directed him to take out the necessary licence, to which he at once acceded. We think, with due care and some improvements that have been suggested to him, this establishment will ultimately become a very useful one for the reception and treatment of incurables and idiotic patients.

We shall not unnecessarily trouble your Excellency by references to individual cases, which have been officially brought under our observation, and on which we have duly reported; or to lunatics confined singly in unlicensed houses, many instances of which we have become acquainted with during the past year, and in whose regard we have either personally or by letter communicated with their family or friends, for the purpose of bettering their condition, either by a change of residence, or by additional means of support.

The returns of single lunatics under the Act 5 & 6 Vic., c. 123, sec. 36, are by no means regular. The law is easily evaded, so much so that unless the party in charge of the individual sends a voluntary intimation to the Inspector's office, we may say we can have none but accidental information on the subject. Patients, for example, are removed from asylums uncured, and we have not the means of tracing their subsequent abode, or even an authority to make inquiries thereon. Lunatics under the Lord Chancellor's protection are, no doubt, safe; but as to the others, it is impossible for us to say what treatment they ultimately receive. We are strongly inclined to think that all insane persons, whether placed on pension or otherwise, should be inspected from time to time, and individual reports made to the Lord Chancellor in each case.

RELIGIOUS CONSOLATION TO THE INSANE.

BY THE REV. JOS. SOUTER,

Chaplain to the Essex County Lunatic Asylum.

As might be expected in an asylum for the insane, a considerable number of the inmates are not capable, in any degree perceptible to us, of being influenced by religious or any other teaching. I speak of those who from birth have been insane, and of those whom disease has reduced to a state of dementia. But there are others upon whose minds the ministrations of religion produce a strong and marked impression. I cannot forbear here to refer to one or two examples. One is that of a male patient who was restored to sanity. Dr. Campbell informed him that he would recommend his discharge. He was

most grateful for the kind intention, but begged to be permitted to remain, as he felt that he had not many weeks to live. He said he knew that if he left the asylum he could not enjoy the advantage of medical advice, and of other kindnesses that he received here; but more than all, he should regret to be taken away from the daily services of the chapel, which had been so great a comfort and blessing to him. Dr. Campbell was moved by the man's entreaties, and with great kindness permitted him to remain, though he knew that by so doing it would only add to the number of deaths. The religion which that man so highly prized supported him through the brief remainder of his days. He looked forward to his end with calmness, and met it with the faith and resignation of a Christian. A rapid consumption, in a few weeks, carried him beyond the reach of all earthly sorrows and trouble, we trust, "to another and a better world."

A second example is that of a female patient, who has now left the asylum in a state of convalescence. She was upwards of sixty years of age, but had never partaken of the Holy Communion till she received it in the asylum chapel. From her manner of speaking on this subject, I should judge that she was strongly impressed with religious feeling. She, too, had found the services of the church to be a blessing to her. I trust she has carried with her to her home that principle of piety which shall be a strength and consolation to her for the remaining years of her life, and which shall enable her, when death comes, to triumph over it, through faith in Him who "has opened to all believers" the gate of everlasting life.

There are not a few patients who, from mistaken notions of religion, refuse the consolations which it offers them, and cling with a strange tenacity to the belief that, though there may be forgiveness for all others, there is none for them. You may quiet their terrors of conscience one day, and on the next you shall find they have returned again to their old and cherished despair. But even of cases such as these I have seen some, not able indeed totally to subdue their melancholy, but strengthened to bear it through confidence in God. I have seen many whose despondency has vanished entirely, and all the gloomy fancies that had haunted them night and day for years have been dispelled; but that change has been the precursor of death. One especially I remember, who died at the commencement of the year. Her dread of death, when first she felt its advances, her ravings of despair, her firm persuasion that she had committed the "unpardonable sin," were sometimes fearful to witness. But a few days before she died all was changed, and happily changed, not in a return to those high delusions which she had once been taught to call religion, but changed to a calm, humble, and penitent belief in the atonement. There was no ecstasy, no unbounded rapture, but there was repentance, resignation, faith. It is not at all unusual in certain similar cases to see them, a few days before death, lighted up with new hopes. The mind is freed from its terrors and its delusions. The sunshine of earlier days revisits the soul. Allow me, however, here to guard against an impression that this is always the case. Many of the insane die as they have lived. Their minds are not lighted up with even a momentary flash of returning intelligence. I have had the most abundant opportunity afforded me for forming this judgment, for I have visited the sick daily. I have gone to the bedside of the dying, in every case, thinking it possible that even in the most bewildered and lost there might occur some moment before death, in which the mind would be prepared to receive the comfort and instruction of religious truth. Even during the prevalence of cholera, feeling it to be my duty to keep up this practice, I went every morning to the bedside of the patients upon whom the scourge of that mysterious disease had fallen. And I rejoice to say, that terrible as it was to witness so many smitten as it were by an invisible hand,—cold and dead in a few hours,—my visits were sometimes

attended also with circumstances of a most affecting and not unpleasing nature. The majority, indeed, sunk at once into total unconsciousness or apathy. But there were some actively alive to their danger, and anxious to receive the last consolations of religion. I cannot omit to notice one in particular. He was an old sailor; he lived several days after his first attack. Each day as I entered the ward he lifted up his hands, and placed them together in an attitude of devotion, as if to signify to me a request to pray with him. I asked him if that were his wish, and he murmured, as well as he was able, "Yes." I then read a few verses from the Bible, and knelt down at his bedside to pray for pardon and strength, and to commend his soul to God; and never have I heard a more earnest and devout amen than that which was whispered so faintly, but so fervently, by that dying man. I have not often witnessed a scene more touching. In that one room were the beds of four other dying men. The eyes of more than one there were filled with tears. Let us trust that He, "who despiseth not the sighing of a contrite heart, nor the desire of such as be sorrowful," would mercifully regard those tears, and hear those prayers, and receive those afflicted men into everlasting rest.—*From the recent Official Report of the Asylum.*

ON THE CAUSES AND TREATMENT OF INSANITY.

BY D. C. CAMPBELL, M.D.,

Physician to the Essex Lunatic Asylum.

RELIGIOUS excitement forms no small number of the assigned causes; and, in accordance with the humane purpose of the institution, I feel it a duty to mention any cause, against the operation of which it may be possible, in some degree, to guard. I do not believe that true religion is ever a cause of insanity, though fanaticism or erroneous theological views undoubtedly may. Mental derangement never can be produced by just views of the essential truths of the Gospel; but intense and long protracted meditation on abstruse points of religious doctrine, or on prophetic mystery, remorse in highly sensitive minds on account of supposed unpardonable sins, and above all, innovation in established religious belief, have been fruitful causes of insanity.

An eminent physician, of great experience in the treatment of mental derangement, in his writings remarked, "Were I to allege one cause which I thought was operating with more force than another to increase the victims of insanity, I should pronounce that it was the overweening zeal with which it is attempted to impress on youth the subtle distinctions of theology and an unrelenting devotion to a dubious doctrine. This practice is an alarming error. It is growing to an excess fatal to the preservation of intellectual sanity, and in a manner especially dangerous to the rising generation." I would recommend to parents to use their best efforts against the influence of new and questionable religious doctrines. The mental distress occasioned by the conflict between such doctrines and earlier religious impressions ends often in confirmed maniacal melancholy; or, as there is a tendency to reaction in our moral as well as in our physical nature, I have seen a sudden transition from the deepest self-abasement to triumphant confidence, with belief in supernatural communications, miraculous gifts, and all the phantasies of an insane mind. Such madness is lamentable in itself; but, in some instances, doubly lamentable, when the patient awakes from his delusion. His religious opinions are then unsettled, and it would be well if he could return to the consolations of that quiet and soothing faith which has given peace to christians in all ages.

Employment in the open air not only improves bodily health, but also

powerfully co-operates, with other means of regulating the mind, in promoting the cure of lunacy. Many of the male patients have laboured most assiduously on the farm and in the garden, from which no small saving to the county has arisen; four large airing courts have been laid out by them, which are now finished, and a large garden has been brought into cultivation, now supplying sufficient vegetables for the establishment. Two of the patients are daily employed as carpenters, four as shoemakers, and two assist the engineer and smith. It will be seen by the tables that a considerable quantity of profitable work has also been done by the females, who in addition to that necessary for the establishment, have made a number of shirts for the Springfield prison, and also for a house in London. The females are principally employed in washing, dressing, sewing, and knitting, and a large number of males and females give their assistance in the wards and at domestic work. In several instances I have remarked that the cases were retrograde or progressive, according as the patients were idle or employed. Among those patients who laboured daily, not a few proceeded with a steady pace to recovery, until soundness of mind was perfectly restored.

It requires no proficiency in the study of mind, nor any experience in the treatment of the insane, to comprehend the utility of labour in promoting the cure of lunacy. Any occupation which serves to arrest the attention of the lunatic necessarily arouses him from his waking dream; and the repose induced by toil no less effectually excludes the visions of the night.

The great object is to make the necessary arrangements of the institution available for the treatment of the patients, to secure as much occupation as possible for them consistent with their health, and to render their services as far as possible advantageous to the institution. The amusements consist of bagatelle, cards, draughts, and dominoes; and books are provided for those who are disposed to read. Several derive much enjoyment from variety of scene, and are permitted to make little excursions into the country, and entertainments with dancing and vocal and instrumental music have been found very serviceable.

The treatment of insanity in all its forms consists less in the administration of medicine than in surrounding the patients with influences, each of which may apparently be very trifling, nay, unfelt and unseen, but the combination of the whole of which produces the most powerful effect; thus they are permitted to enjoy the greatest possible degree of liberty, consistent with their safety, and furnished with the means of such suitable employment, amusements, and recreations, as serve both to relieve the irksomeness of confinement and to promote the cure of the malady. I cannot omit this opportunity of pressing upon public attention the importance of early medical treatment, and the unhappy consequences which arise from the delay so frequently prompted by mistaken affection and shortsighted economy. It is at the commencement of the disease that medical treatment is most obviously demanded and most likely to be efficacious; for notwithstanding the most violent symptoms, if the disorder is of recent occurrence, it generally yields to proper treatment. This important truth, which prejudice, ignorance, and false delicacy are too apt to overlook, is forcibly illustrated in the experience of every asylum. Nothing is more imprudent of the friends of such individuals in trusting, for any period, an unfortunate relative to their own inexperienced, and too often injudicious management, for it is one of the most melancholy attendants on this disease, that it frequently destroys and disregards the ties of nature, and that a patient never can be more unhappily placed than in the circle of his own dearest friends and relatives.—*From the last Report of the Asylum.*

OPENING OF AN INSTITUTION FOR THE TREATMENT OF IDIOCY IN EDINBURGH.

HITHERTO only one institution has existed in Scotland for the treatment and training of imbecile and idiot children; that, namely, which was founded two years ago by Sir John and Lady Jane Ogilvy, at Baldovan, near Dundee. It is with pleasure we announce that another is nearly ready for opening in Edinburgh.

So much of the hoped-for success must depend upon the careful adaptation of the physical treatment to the circumstances of each case, that it appears essential to the efficient working of such institutions that they be superintended, if not conducted, by well-qualified medical men. We are, therefore, happy to learn that the Edinburgh School will have the aid of Drs. John Smith and Coldstream, as physicians; while the immediate management and superintendence will be in the hands of Dr. David Brodie. It will be, we trust, the care of these gentlemen to establish a psychical sanatorium for the young, worthy of the metropolis of Scotland, and of the Medical School of Edinburgh.

It is, indeed, rather a humiliating consideration that, whereas it was in Edinburgh that the first institution that ever existed for the education of the deaf and dumb, was established (in 1760 by Mr. Thomas Braidwood), we have been so tardy in commencing operations for the benefit of a section of society so long neglected, but so much in need of such aid as science can give, and this notwithstanding the encouraging results reported as having been obtained elsewhere. Our dilatoriness in this matter is all the more remarkable, seeing that it was in Edinburgh that the first earnest appeal on behalf of the neglected idiot was published, and that so long ago as in 1819. In his interesting Essay on Education, which first appeared in that year as an article in the *Encyclopædia Edinensis*, and subsequently (in 1825) as a separate treatise, Dr. Richard Poole thus wrote:—"It is obvious that there is ground for employing medical advice in cases of general imbecility presenting in early life; and there cannot be a doubt that cases of this kind, which are allowed by despair to become confirmed and deteriorated, might have been relieved by professional interference. The correctness of the principles on which Dr. Poole ventured to found so strong an asseveration, has latterly been fully proved by the experience obtained in several institutions established for the treatment of congenital idiocy; the general result being, that, under suitable means, almost all are improveable; and that "for three-fourths of the children treated, much may be done to rouse intelligence, and even to fit for usefulness."

This unlooked-for result has stimulated some of the European governments, and several benevolent individuals in different countries, to exert themselves on behalf of the poor idiot. The existing institutions at Redhill and Highgate, near London, at Colchester and at Bath, are probably known to most of our readers; also the schools for adult idiots at Hanwell, in England, and Bicêtre, at Paris (not to speak of the world-renowned hospice of the Abendberg, conducted by Dr. Guggenbühl, whose success in treating cretinism has gone far to excite a general interest in this subject); but it is perhaps not so generally known, that some distinguished members of the medical profession in Denmark, Prussia, Saxony, and Wurtemberg, have, more or less recently, devoted themselves to the forwarding of this good work in various ways. For example, in Copenhagen, the learned Professor of Physiology in the University, Dr. Eschricht, published last year an interesting treatise "On the Possibility of Educating Idiotic Children to become useful Members of Society." In the same city, Dr. Hybertz has published an elaborate statistical inquiry into the extent to which idiocy prevails in the various countries of Europe, and has also devoted himself to the treatment of a certain number of childrer

affected with it. Still, in the Danish capital, M. Moldenhawer has commenced a work of the same kind; while, in Schleswig, Dr. Hansen is similarly employed. Dr. Sägers of Berlin, Director of the Royal Institution for the Deaf and Dumb in that city, has written much and well on the treatment of idiocy, and has for several years laboured personally in training imbecile children. At Bendorf, near Coblenz, Dr. Erlenmeyer has a small establishment of the same kind. In Saxony, Dr. Kern at Leipsic, and Dr. Gläsche at Hubertsburg, near Dresden; in Wurtemberg, Dr. Müller at Winterbach, and Dr. Zimmer at Mariaberg—are all in charge of institutions for treating idiocy, varying in extent.* In the same way the work is extending in the United States of America. There are now, we believe, at least four establishments (one in each of the States of Massachusetts, New York, Pennsylvania, and Virginia) supported at the public expense, besides private ones. The reports of that at Boston, published by Dr. Howe, are of great interest and value.

A proof of the zeal in this good cause which exists in Denmark has lately been shown in the mission of a gentleman, in all respects well qualified, charged by the Government of that country to visit, and report upon, all the institutions for the cure of idiocy in Europe. This commissioner (Mr. John Moldenhawer, who published last year an account of the German establishments), after having visited the English schools, came to Edinburgh in expectation of seeing something worthy of his attention, and was disappointed. Dundee alone, in all Scotland, could furnish him with the material for his report.

The subject of the treatment of idiocy lately engaged the attention of the Academy of Medicine at Paris; a paper on it having been read before that body, in July last, by M. Delasiauve, physician in charge of the epileptics and idiots at Bicêtre. This author homologates the axiom of Voisin, regarding the object of the education of the idiot,—namely *to develop what already exists*. He announces a classification of idiots with reference to their various degrees of aptitude for education, and suggests some improvements, both of a general and of a special kind, which he thinks ought to be introduced into establishments devoted to the cure of idiocy.

The above narration will serve to prove how earnestly our brethren in other lands are endeavouring to carry into practical operation the idea of its being possible to rescue the poor idiot from that hopeless degradation and neglect to which he has hitherto been consigned. Let us now, although late, do what we can to emulate the good example thus set us.

To return to our projected Edinburgh Institution, we have further to state, that, as it is desirable to make it self-supporting, the lowest rate of board to be charged will be forty-five pounds *per annum*, and for the first-class accommodation, the charge will be seventy-five pounds. It is expected that the house (which is No. 10, Gayfield Square) will be ready for the reception of pupils in the beginning of October.

The prospectus bears that,

“The institution will receive a certain proportion of children and youth not affected with mental imperfection or peculiarity, but who are, from bodily ailments or other causes, unable to take their place at ordinary schools. The combination which this Institution presents, of practical medical experience with efficient educational resources, will supply, it is hoped, a want which is much felt by the parents of children in the condition here referred to.”

We cordially recommend this infant institution to the favourable regards and support of our readers.—*Edinburgh Medical Journal* for September.

* If to this list be added the establishments of Pastor Frobst, at Exberg, in Bavaria, and of Pastor Bost, at Laforce, (Dordogne,) in France, we have a tolerably complete enumeration of the institutions for the benefit of idiotic children, now existing in Europe.

INFLUENCE OF ETHER AND CHLOROFORM ON THE MIND.

DR. BEALE, a dentist in Philadelphia, was a short time ago accused and convicted of a gross outrage upon a young lady, upon whom he was performing dental operations, while under the influence of chloroform. The only evidence against him (says the "New York Daily Times") was that of the lady herself; while, on his side, was the weight due to high character, long enjoyed, and never before impeached, the most solemn and emphatic asseverations of innocence, and the established fact, that persons under the influence of chloroform are always out of their senses, and often subject to the strangest fancies and delusions. The conviction is very strong that Dr. Beale's guilt was not proved, and that he is entirely innocent of the heavy charge brought against him. In view of the circumstances attending this case, a meeting of eminent dentists of New York was held, on the 4th inst., to give their experience of hallucinations which had fallen under their observation, from the use of chloroform. Many very remarkable instances were adduced.

Dr. Allen had observed that the patient would frequently insist that the tooth removed under the influence of ether was not out; and nothing but feeling the cavity, or seeing the tooth, would convince them to the contrary.

Dr. Burras related a case of a lady, who placed her brother's hat on her head, put on his coat, and nursed the sofa pillows on her lap, completely forgetting all she had done when she became rational and conscious. A gentleman, on whom he had operated, became outrageously violent, bellowing furiously, and exclaiming, "I've got you now, Bill Brookes." On the effect of the ether passing away, the patient said that he had imagined that he was at home at Portchester, that "Bill" was robbing his money drawer. A young lady protested that the doctor had slapped her in the face; and though contradicted, persisted in her statement, calling for a mirror to show the red spot caused by the alleged blow.

Dr. Barlow had known ladies (of course unconsciously, yet seemingly not so at the moment) divulge their dearest and most delicate secrets, or relate things they would not wish on any account published. He told an amusing story of an Irishwoman, who maintained that during her forced somnolency she had been in Ireland, and saw there her father, mother, and friends. A woman under such circumstances might be quite honest and faithful in her statements; her impressions have all the force of realities.

Dr. Burdell corroborated the statements of the preceding speaker. He had observed that almost invariably there is a strange misconstruction of passing events. He related a very strong instance in point. A gentleman brought a lady to have a tooth removed; he wished her to use ether. After the operation was over, she said, "George, what did you kiss me for? you took advantage of me."

Dr. Burras referred to a case where a man changed the scene of a dentist's surgery into a bedroom, maintained that there was a woman present, and insisted on her being turned out, exclaiming, "What is that woman doing in my bedroom?"

Dr. Castle, of New York, had not used ether for the last three years; was quite convinced of its injurious effects.

Dr. Crowell stated that a young lady came to have her tooth extracted, accompanied by her mother. No sooner was it removed than she angrily complained that he had very rudely kissed her, and no assurance of her mother could convince her to the contrary. So strongly riveted is the impression that, though nine years ago, on his asking her at Saratoga if she had got rid of that foolish impression, she said, "Oh, that's nonsense; you know you did." In another case, a female insisted that he threw her on the floor, and knelt on her while he removed a tooth. The doctor mentioned other similar illusions.

Mr. Dillingham had always had the presence of the family physician, or a note from him. He did this upon principle. There were always hallucinations, some remembering partially what was passing.

Mr. Francis said, one lady, while under the influence of chloroform, used language of the most ridiculous, profane, and even obscene description. When recovered, she seemed perfectly unconscious of having uttered any improper expression, and apparently not accustomed to its use.

Dr. Hazlett stated, that a young married lady, of a religious disposition, as she felt the influence of the ether, caught him round the neck in the most endearing manner.

Mr. Hurd related a case where, in presence of her husband, a lady, under the influence of ether, followed, or rather chased himself, the operator, round the room, affording most unmistakable signs of perverted feeling, so much so that her mortified husband desired him not to give her any more. Dr. Bennett was also present.

Dr. Parmeley said, one lady thought she had died, and been in hell. He added, "I would not believe the testimony of my own wife as to anything she might relate while she was under the influence of ether or chloroform."

Dr. Puntam took out twenty-eight stumps and teeth from a female. She said she had been much abused—that he had taken her to Jersey city and abused her in the ferry-boat; but, after many attempts to console her, she said she would try to believe what the lady told her who had been present during the operation.

Mr. Robbins, of Jersey city, had seen more than five hundred instances of the employment of ether. In one case a lady, while passing under its influence, wept most bitterly, said he was ill-using her most shamefully, and even after the extraction of the teeth she thought, and still thinks, that some one did abuse her.

Dr. Dressler stated that he had seen several hundred cases; in one of these a young lady persisting he had given her a kiss, and but for the presence of her mother he had no means of proving the contrary.

Several of the speakers (adds the "New York Times") uttered their earnest convictions of the innocence of Dr. Beale of Philadelphia; one of them had known him intimately sixteen years, and was satisfied he was incapable of the crime laid to his charge. Many who did not know him uttered the same opinion. One, who spoke in language as calm as it was energetic, asked whether the indignant denial of a man whose life had been spotless was not of equal, if not of more, value than testimony liable, as they had all seen, to so many cases of unintentional fallacy?

A further scientific discussion, of the same important subject, took place at a second meeting of New York dentists held on the 8th instant. A large number of dentists attended, and, while a good many coincided in their views and experience with speakers at the previous meeting, some reported that they had not found in their practice any instances of mental hallucination remaining after the effects of the ether had passed away.

Dr. Allen (the Chairman) said he was unable to cite, from his own practice, which had been limited, any case bearing for or against Dr. Beale.

Dr. Kingsley had never seen any hallucinations.

Dr. Lord had witnessed various hallucinations, but never saw evidence of amorous excitement.

Dr. Root never saw anything like indecorousness, save slightly in one case. Had seen cases of hallucination which, however, were dispelled by returning consciousness.

At the close of the meeting a petition for Dr. Beale received many additional signatures.

Dr. Brown, chairman of the first meeting, expresses, in a letter to the "New

York Daily Times," his theory respecting Miss Mudge's delusion, as follows :—"My own opinion is, that in the case under consideration, the young lady entered the abnormal state under the impression of a fear that the operator might take advantage of her unconsciousness; that whilst under the influence of ether, this fear was distorted into an actuality; and that this impression was revived, thus distorted, sooner or later, after her perfect restoration to a normal state of mind."

CASE OF A GENTLEMAN WHO WAS BORN DEAF AND DUMB, AND SUBSEQUENTLY BECAME INSANE.

BY JAMES B. BALFOUR, M.D., EDINBURGH.

No apology is necessary, on my part, in presenting the following case to the notice of my professional brethren, as I believe it is one which is perfectly unique. The only apology necessary is, that such an interesting case should not have been related by one far more able to elucidate the many scientific points which this presents, both to the medical man and the psychologist. Perhaps some excuse may be found in the fact, that it came under my observation at an early period of my professional studies, and before I was able to bring that knowledge, subsequently acquired, to bear on a subject of such deep importance. I give the case as I find it in the notes, which I at the time made, with the remarks which I then appended to it. And I will certainly feel glad if any of your contributors, engaged more immediately with the study of psychological science, will favour us at some future time with their remarks upon it.

The subject of my memoir was a native of Ireland, belonging to a wealthy and highly respectable family. He was born deaf, and, as might be expected, never acquired the power of imitating sounds, or, in other words, was dumb. When he grew up, his friends sent him to Edinburgh, to be under the care and teaching of the famous Mr. Kinniburgh. While at this school he made great proficiency in learning, and exhibited a more than usual amount of talent. He remained some years with Mr. Kinniburgh, and when his powers were considered sufficiently developed, he was removed by his friends to his native country, in one of the flourishing commercial towns of which, through the influence of a relative, he obtained a situation as a clerk. While he held this situation he displayed great proficiency in book-keeping, and the general transactions of business; and so high did he rise in the estimation of his employers, not only from his general aptitude for business, but also from his quiet, amiable manners, that he was their head-clerk, which situation he retained for many years, and, indeed, until he became incapable of doing so from mental aberration. From a child he was remarkable for the healthiness of his constitution, but, as he grew up, he gradually became very stout and corpulent, and when about thirty-five years of age, he was suddenly attacked by a fit of apoplexy. From this he recovered, but ever afterwards he was observed to have a slight dragging of the right leg, showing that there was some permanent lesion of the brain. It was after this attack that the first signs of mental aberration began to present themselves; he was not so correct in his book-keeping, and it was discovered, when holding communication with him, that he entertained some strange notions in regard to religion, which was the more remarkable, as previous to this period he had been very strict in his religious tenets, and a member of the Protestant church. The ideas which he now began to hold, as might be easily anticipated, could never be very accurately ascertained, but they appeared to have reference to some mysterious connexion which existed between himself and the Saviour; and other ideas of a similar nature. His

conduct, at the same time, began to be influenced by the ideas he entertained, and it was ultimately found necessary to remove him to a place of confinement. He was, therefore, removed to an asylum for the insane, and it was while there that I had an opportunity of observing him.

The dragging of the right leg still continued to a slight extent, but otherwise, he was in robust health. He was merry and good-natured, and soon became quite happy in his new situation. No clear idea could ever be obtained of the state of his mind, so far as his delusions were concerned, as he always avoided entering upon those topics on which he was said to be insane (a peculiarity this, not confined to a case like his, but very common amongst insane persons). He had at this time lost, to a great extent, the use of the finger alphabet, but he held communication with those around by means of writing. He always carried his slate with him, and it afforded him great pleasure when any one would hold communication with him by its means. He was a great reader, and always selected his own books. He asked for the library catalogue, and pointed out the book or books he wished to peruse, and it was remarkable how he selected books of interest, both in history and miscellaneous literature. He appeared to enjoy such passages in the works which he read, as exhibited wit and humour, for he was often observed laughing to himself while reading, and on being interrogated what made him do so, he pointed to the passage, and it was invariably found to be one which would excite the risibility of a sane person. There was one peculiarity about him which was curious, and which is particularly worthy of notice, as there can be no doubt it was connected with his insanity—it must have had some connexion with his delusions, could we have discovered it. He believed he was not deaf and dumb, but that he could speak perfectly well, and it was those around him who were in that condition. He would write this down upon his slate, and when asked to give a specimen of his talkative powers, would commence to utter the most discordant sounds, and if told that was not talking at all, he would get rather ill pleased, and state that it arose entirely from the stupidity and deafness of the party inquiring, who could not understand what he said. All this conversation, remember, all the while, being carried on by writing on his slate.

During his residence in the asylum, he mingled in all the amusements which are continually had recourse to in such institutions of the present day, in order to relieve the patients of the ennui of confinement, and to endeavour to rouse their dormant faculties, or drive away their morbid thoughts. He attended the musical concerts, and although the sweet sounds of the music, in his case fell upon ears closed to all their beauty, he yet appeared pleased with the exhibition, and clapped his hands and laughed when others did it. And at the little select evening re-unions which frequently took place, he was the happiest of all.

I now come to give an account of one of the most interesting scenes it has ever been my fortune to witness. In the neighbouring town to where the asylum is situated, there is a school for deaf and dumb children, which is taught by a gentleman who is also deaf and dumb. Upon one occasion the children were all brought to the asylum to exhibit before a number of the patients their proficiency in learning. Great interest was exhibited in this exhibition by the patients present; and the patient who is the subject of this notice was present among the rest, and his enjoyment appeared unbounded. After the exhibition was over, he was introduced to the teacher of the children, and they began to converse together. The teacher told him he was educated at Kinniburgh's, and asked where he had been taught. On hearing this the patient looked intently at him for some moments, suddenly uttered a cry of joy, and rushed into his arms. The expression of his joy is such as we could fancy being made by a wild Indian. He danced, laughed, and screamed in turns; and it was some time ere those around could understand the cause of such

unusual excitement. At length the teacher explained that the two had been intimate acquaintances at Kinniburgh's, eighteen years before; and although thus long separated, and never having met during the interval, he had recognised in the person before him his old school companion. Memory had recalled the happy days of his youth, and his joy burst forth in the manner I have described. It has never been my lot to witness a more interesting meeting, and it would require a far abler pen than mine to convey even a faint idea of the scene which took place. The joy he exhibited upon this occasion was the more remarkable, as he was from time to time visited by a favourite brother, and although he always appeared glad to see him, yet he never made any marked demonstration of joy. After this the teacher frequently visited him, and he always exhibited marked pleasure at the meetings, both by signs and noises. About this time, however, he had another apoplectic attack, from which he recovered so far as to be able to be out of bed, but he was now a changed man; his power of voluntary motion was greatly impaired, and instead of being merry and active, he spent the greater part of his time in a state of sleep. He could not be induced to read or converse by means of writing. At times, indeed, a faint glimmering of his former cheerfulness would return, but only as it were to show that the mind was still there, and he would again relapse into his condition of drowsiness. The mind was, as it were, locked up, and even the ordinary means of access under such circumstances were denied to us. He continued thus for two or three months, dead to the external world, and leading almost an animal existence, when a third attack of apoplexy put a period to his sufferings, cares, and trials.

In this case, a *post mortem* examination was kindly permitted to be made; and I noted the following as the appearances presented. I can only regret, that some one more capable than I am, had not been present to give me the aid of his powers of examination and observation.

As might have been expected, there was no lesion observable of either the abdominal or thoracic viscera. On opening the head, the blood-vessels on the surface of the brain were found to be more than usually congested; the brain itself was found to be large and firm, and on cutting into its substance, presented a congested appearance. There was slight effusion into both ventricles. There was marked softening of the left corpus striatum, though not to a great extent. Both internal ears were removed, and in company with a friend, who was distinguished for his anatomical knowledge, I examined them most minutely, but we could discover nothing either in their structure or arrangement, which could account for the deafness; everything appeared quite natural. We had no microscope at our command to examine the state of the nerve, otherwise this would have been done, but, so far as ocular demonstration went, it also appeared to be natural.

Having thus brought the history of this extraordinary case to a conclusion, I would only add one or two remarks which suggest themselves. In the first place, from what cause did the deafness arise? We have seen, from the *post mortem* appearances, that it could not have arisen from any malformation of the ear itself, as all parts of that organ were perfectly natural. Did it then arise from some defect of the auditory nerve, incapacitating it from conveying impressions made upon the ear to the sensorium? Or did it arise from some affection of the sensorium itself in connexion with the auditory nerve? I have already said that I was not able, microscopically, to examine the nerve and brain, and, therefore, cannot say whether any organic change existed. We are still very ignorant of what are the causes of many cases of congenital deafness, and it is a subject which offers great scope for microscopical investigation, as in many cases there is nothing in the structure of the ear, or in the auditory nerve itself, which, to the naked eye, can account for this infirmity.

Another interesting point is, the cause of the extraordinary mental phenomena presented by this patient. This case presents one of a most interesting character for the study of the psychologist, and I trust some of my brethren in the profession will take up this point, and present us with their views upon the subject.

I have given the case as fully as possible, from the notes I made at the time; and I trust I will be excused for not entering more minutely than I have done into the points of interest which it presents.—*Edinburgh Medical Journal.*

AMONGST the prevalent *on dits* is one relative to a vacancy on the Medical Board of Visiting Commissioners in Lunacy, which it is said will immediately occur. It is well known the Lord Chancellor has this piece of patronage in his gift. We have no doubt that his lordship will weigh the special psychological qualifications of each candidate (for we understand there are many in the field), and will only select for the vacant post a gentleman who has established, by his labours in reference to the subject of insanity, the treatment of the insane, and the management and organization of Lunatic Asylums, that he is in all right essentials fully qualified to perform the onerous duties of so responsible an appointment to the satisfaction of the profession, the public, and all who take an interest in the amelioration of the condition of the insane.

To Correspondents.

The conclusion of the article on *Oinomania* is unavoidably postponed until our next number.

In the number for JANUARY, 1856, will be published, No. 1 of a Series of Papers entitled

Notes of a Visit

TO THE

PUBLIC LUNATIC ASYLUMS OF SCOTLAND,

By JOHN WEBSTER, M.D.;

AND

An Elaborate Essay

ON SOME

UNRECOGNISED FORMS OF MENTAL DISORDER,

By FORBES WINSLOW, M.D.

INDEX TO VOL. VIII.

- ALCOHOL, pathological influence of, on the brain, 180
- American institutions for the insane, 152, 433, 562
- American psychological literature, 375
 — state schools for idiots, 291
- Asylums, amusements in, 349
- Asylum Journal*, the, 69
- Asylums, organization of, 375
 — state of, in Ireland, 581
- Autobiography of the insane, 338
- Autopsies performed in the Vienna Lunatic Asylum, 558
- Berkeley, psychology of, 354
- Bethlem Hospital, annual report of, 4
- Brain, the, in relation to the mind, 317
 — researches into the functions of, 512
 — gravity of, in cases of insanity, 573
- British asylums for the insane, 1
- Bucknill, J. C., M.D., on unsoundness of mind in relation to criminal acts, 207
- Buranelli, case of, medico-legally considered, by Forbes Winslow, M.D., D.C.L., 459
- Campbell, Dr., on the cause and treatment of insanity, 585
- Cartesian psychology, 54, 59
- Cerebral pathology, 161
 — symptoms, effects of, on different diseases, 405
- Certificates necessary for detention of a lunatic, 121
- Colney Hatch Asylum, *post-mortem* examination in, 4
 — third annual report of, 3
- Commissioners in Lunacy, their report on seclusion in the treatment of the insane, 30
- Consciousness, its different phases, 320
- Counsel, conduct of, towards witnesses, 106
- Cretinism, researches in, 74
- Crime and insanity, tabular statement of, 132
- Criminal cases, commissions *de lunatico inquirendo* in, 229
- Criminal law, monomania in relation to the, 75
 — anomalous state of, in regard to criminal lunatics, 464
 — responsibility of madmen, 541
- Deaf and dumb, case of a gentleman who was born, and subsequently became insane, 591
- De lunatico inquirendo*, evidence in cases, 96
- Delasianre, M., on epilepsy, 262
- Delirium, considered, 401
- Delirium tremens*, 186
- Delusion, non-existence of, no proof of absence of insanity, 118
 — the product of a diseased intellect, 119
- Dementia, phenomenology of, 402
- Demoniacal possession and insanity, 391, 483
- Denham, Rev. I. F., on the connexion between morbid, physical, and religious phenomena, 148, 415
- Derby County Lunatic Asylum, annual report of, 8
- Descartes compared with Bacon, 65
 — his early philosophical studies, 55
 — his theory of substance, 63
 — on psychology, 54
 — on the Divine agency, 65
- Devon, County Lunatic Asylum, 15
- Disease, moral and intellectual, 216
- Divine agency, Descartes on the, 65
- Dorset County Lunatic Asylum, annual report of, 20
- Drunken madmen, treatment of, 205
- Drunkenness, paroxysmal, 193
 — phenomena of, 177
 — writers on, 176, 181
- Dundee Asylum, 29
- Dyce Sombre v. Troup, 447

- Earll, Dr. Pliny, on American institutions for the insane, 152
- Edinburgh Asylum, 26
- Education, influence of, on the mind, 240
- Epilepsy and the allied affections, by C. B. Radcliffe, 35
- cases of, 259
- hereditary character of, 264
- how distinguished from other affections, 253
- its classification as a disease, 49
- prognosis of, 253
- statistics of, 263
- consequences of, 74
- influences governing the phenomena of, 48
- the phenomena of, 37
- varieties of, 41
- pathology of, 41
- treatment of, 256, 265
- Epileptic tendency, conditions favourable or conducive to the development of, 45
- Ether and chloroform, influence of, on the mind, 589
- French psychological literature, 72
- Friend's Retreat, the, 12
- Galt, Dr. J. M., on pledges extracted from the insane, 134
- Gauster, Dr., on the morbid anatomy of the brain, 558
- Glasgow Lunatic Asylum, 24
- Guislain on insanity, 401
- Hallucination, considered, 244
- Hanwell Lunatic Asylum, ninth report of, 1
- report of the matron of, 3
- Hawkes, J., on the materialism of insanity, 313
- Heigham Hall Lunatic Asylum, Norwich, 168
- Herpin, Th., on epilepsy, 35
- Homicidal cases of insanity, liberation of in Ireland, after recovery, 467
- Hospitals for the intemperate, 170
- Hyperphreny, 248
- Idiocy in Ireland, opening of an institution for the treatment of, 587
- Idiots, American state school for, 291
- and lunatics in Ireland, their condition, 328
- Insane, American institutions for the, 152, 433
- Autobiography of the, 338
- Insane, British asylums for the, 1
- imperfect responsibility of the, 209, 222
- pledges extracted from the, by Dr. J. M. Galt, 134
- results of experiments on the blood of the, 87
- Scotch institutions for the, 23
- seclusion in the treatment of the, report of the Commissioners in Lunacy on, 30
- alteration of the blood-corpuscles in connexion with physical disease in the, 88, 90
- the appearance of their blood, 83
- the histology of their blood, 78
- great mental impairment in the, without alteration of the blood-corpuscles, 93
- their aversion to operations, 82
- their treatment, amelioration of, 348
- Insanity and crime, tabular statement of, 132
- causes of, 11
- constructive, 218
- critical remarks on the plea of, by Richard Poole, M.D., 266
- definitions of, 111, 118, 210
- hereditary, 13, 202
- importance of early treatment of, 13
- its effect on marriage, 95
- materialism of, 313
- medico-legal evidence in cases of, 94
- mode of manifesting, 245
- modes of establishing the existence of, 111, 127
- moral, 220
- origin of, by L. F. E. Renaudin, 233
- Plea of, in criminal cases, defence of, 128
- produced by religious excitement, 10
- symptoms of, 124, 127
- treatment of, 11, 35
- use of the stomach-pump in cases of, 13
- Instinctive insanity, 217
- Intoxicating drinks, adulteration of, 182
- Intoxication, crimes produced by, 185
- Intemperance, madness produced by, 187
- the mental pathology of, 175
- Intemperate, hospitals for the, 170
- Ireland, lunatics and idiots in, statistics of, 331

- Ireland, lunatics and idiots in, their condition, 328
- Isolation, effects of, on the mind, 252
- Jurisprudence, medico-legal, 296
- Jury, functions of, 232
- Laycock, Dr. Thomas, on the functions of the brain, 512
- Legal definition of insanity, 212
- medicine, 76
- Lettsomian lectures delivered before the Medical Society of London, by Forbes Winslow, M.D., D.C.L., 94
- Lindsay, W. Lauder, M.D., on the histology of the blood of the insane, 78
- Lucid interval, evidence in cases of, 95
- Lunacy, how considered by the Roman law, 100
- the non-restraint system in the treatment of, 71
- the restraint system in the treatment of, 71
- Lunatics and idiots in Ireland, statistics of, 331
- condition of, 328
- Lunatics, proceedings necessary for confinement of, 121
- moral treatment of, 6
- Madness produced by intemperance, 187
- Malebranche, his opinions, 359
- Man, connexion of the physical and somatic element of, 234
- Materialism, Berkeley's opinions concerning, 354
- its signification, 361
- Mayo, Thos., M.D., F.R.S., on medical testimony in cases of lunacy, 207
- Medical assessors in cases of insanity, 230
- juries in cases of insanity, 231
- witnesses, duties of, 100, 103, 120
- Medico-legal evidence in cases of insanity, 94
- jurisprudence, 296
- Memory, its functions, 324
- Mental alienation, types of, 236, 248, 262
- diseases, on the causes and morbid anatomy of, by John Webster, M.D., F.R.S., 139, 282
- philosophy, on the uses and influence of, by M. J. Rae, M.D., 379
- Mind, development of its faculties, 324
- on the, 408
- the, in relation to the brain, 317
- Mind, study of the philosophy of, 493
- Monomania, nosology of, considered, 249
- in relation to the criminal law, 75
- Morningside Asylum, narrative of a residence in, 338
- Natural capacity considered, 327
- Non-restraint system, 6, 10, 30, 71
- originator of the, 72
- Norfolk County Asylum, annual report of, 23
- Lunatic Asylum, annual report of, 8
- North and East Riding of York Asylum, management of, 71
- Oinomania, 175, 199, 202
- Opium-eater, confessions of an, 183, 189
- its effects on the mental system, 183, 189
- Paralysis, general, 404, 409
- Parliamentary report of the number and condition of lunatics and idiots in Ireland, 328
- Physical and religious phenomena, morbid connexion between, 415
- Pinel on the humane treatment of the insane, 556
- Plea of insanity, critical remarks on, 466, 421
- Polydipsia ebriosa, 176
- Poole, Richard, M.D., on the plea of insanity, 466, 421
- Psychological investigations, importance of, 381
- prejudice against, 379
- Psychological literature, American, 375
- French, 72
- Psychology of Berkeley, 354
- Psychological terminology, a new, suggestions for, 173
- Puerperal mania, treatment of, 309
- Radcliffe, C. B., M.D., on epilepsy and the allied affections, 35
- Rainhill Asylum, annual report of, 23
- Ray, M. J., M.D., on the uses and influence of mental philosophy, 379
- Religious excitement in producing insanity, 10
- consolation to the insane, 533
- instruction of the insane, 463
- persuasions, statistics of, 472
- phenomena, 478
- Renardin, L. F. E., on the origin of insanity, 233
- Restraint in cases of lunacy, 71

- Scotch institutions for the insane, 23
 Seclusion in the treatment of the insane, 30, 32
 Skae, Dr., on cerebral pathology and specific gravity of the brain in cases of insanity, 573
 Softening, cerebral, 409
 Somerset County Asylum, annual report of, 22
 Souter, Rev. Jos., on demoniacal possession, 391
 — religious consolation to the insane, 583
 Staffordshire Lunatic Asylum, annual report of, 22
 St. Luke's Hospital, annual report of, 22
 Stephen on the criminal responsibility of the insane, 541
 Suffolk Lunatic Asylum, annual report of, 17
 Suicidal mania in the drunkard, 188
 Surrey Lunatic Asylum, annual report of, 7
 Swan, Joseph, on the brain in relation to the mind, 322
 Testamentary disposition, validity of, 94
 Treatment of the insane, claim of priority in the reformation of, 556
 — and causes of insanity, 585
 Tuke, Dr. W., a memoir of, 507
 Trials, medico-judicial, 378
 Unsoundness of mind in relation to criminal acts, by J. C. Bucknill, M.D., 207
 — in its mental and legal considerations, by J. W. Williams, M.D., 207
 "Unsound mind," legal meaning of, 96
 Webster, John, M.D., F.R.S., on the causes and morbid anatomy of mental diseases, 139, 282
 Will made by an insane person, 94
 Wilts County Asylum, annual report of, 12
 Winn, J. M., M.D., on the treatment of puerperal mania, 309
 Winslow, Forbes, M.D., D.C.L., Lett-
 somian lectures delivered before the Medical Society of London by, 94
 Winslow, Forbes, M.D., D.C.L., on the case of Buranelli, 459
 York Retreat, the founder of, 507

THE CASE
OF
LUIGI BURANELLI

Medico-legally Considered.

BY
FORBES WINSLOW, M.D., D.C.L.
LATE PRESIDENT OF THE MEDICAL SOCIETY
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LONDON:
JOHN CHURCHILL, NEW BURLINGTON STREET.

MDCCCLV.

CASE OF BURANELLI.

THE case of Luigi Buranelli has excited, among all classes of the community, an intensity of interest almost unprecedented in the records of British criminal jurisprudence. That this miserable man was a lunatic when he committed the crime for which he suffered an ignominious death upon the gallows; that his life was cruelly sacrificed in blind submission to the speculative medical and mystical metaphysical opinions of those who, in the performance of what they no doubt conceived to be a painful professional duty, swore to his sanity and responsibility, are points easily susceptible of conclusive and triumphant demonstration. Were we to defer to the dictates of our own personal feelings, the curtain should drop at once and for ever upon this terrible drama—this dreadful legal tragedy; but the sacred call of HUMANITY, of JUSTICE, of DUTY, imperatively and irresistibly forces us to bring this subject, in all its revolting details, before our readers, and renders it necessary that we should accurately analyse and rigidly criticise the general and scientific evidence adduced during the trial of this unhappy criminal. It is a sad, sickening, and repulsive duty that we have imposed upon ourselves; but we cannot conscientiously shrink from its performance.

The execution of Buranelli will, we fear, be a foul stain and a “damned spot” upon the humanity and intelligence of the nineteenth century, and will, we apprehend, do an incalculable amount of injury to the advancement of the science of medico-legal testimony in cases of alleged lunacy, and seriously retard the progress of British Medical Psychology. The execution of Buranelli, in direct opposition to the evidence adduced in favour of his insanity, and in defiance of the strong protest subsequently made against his death, will throw judicial psychology back in this country for at least half a century. Enlightened medical jurists had flattered themselves that great progress had in recent times been made in the dissemination of just and humane principles in reference to criminal jurisprudence. Able judges and distinguished advocates have certainly exhibited of late years a disposition to entertain views in regard to criminal insanity, more in unison with the deductions of modern science; but this event throws a melancholy

blight over these bright hopes and sanguine expectations. We have, since the establishment of this journal, in 1848, striven to the utmost of our humble ability to place the great subject of insanity associated with crime on a philosophic basis, and have endeavoured to dissipate the many fallacies that unhappily prevail in connexion with the different branches of psychological medicine. We have no desire to make an ostentatious display of these labours; it has been our pride and pleasure to be engaged in such a work of LOVE and MERCY, and have ever esteemed it a noble privilege to stand forward as advocates in so holy and righteous a cause. We have never, in the performance of our editorial duties, allowed an opportunity to escape without placing before our readers, clearly and distinctly, what in our judgment we conceived to be the right, humane, and scientific view of insanity in all its relations, and we have been particularly anxious to impress upon the minds of our readers the principles that should not only guide the judicial tribunals of the country in adjudicating in cases of alleged criminal insanity, but direct the medical witness when called upon to give evidence in these important cases. We cannot therefore contemplate the late fearful catastrophe otherwise than with feelings of deep and painful emotion.

The trial and execution of Buranelli establishes that we had somewhat miscalculated the amount of enlightened progress made of late in judicial psychology, for we not only find a Judge, distinguished for his learning, natural sagacity, and eminent acquirements, disposed to repudiate the plea of insanity, when based upon what able, experienced, and reflecting men conceive to be conclusive evidence, but we, alas! see medical jurists of character and position stepping boldly forward to support, by the weight of their testimony and the authority of their names, one of the most monstrously iniquitous verdicts of modern times! This we conceive to be the unhappy feature, the salient point of the case, as far as the science of medico-legal testimony and the state of psychological medicine are concerned. To be routed by a flank movement; to have our redoubts seized; our own guns pointed at us; to be exposed to a murderous fire from those upon whom we fully calculated for support at the hour of danger; to be deserted by some of our own allies at a critical moment, are matters deeply to be regretted, and sadly to be deplored! Much mischief must result from this retrograde movement.

With these preliminary observations we proceed to lay before our readers a full narrative of Buranelli's case, in conjunction with the general and medical evidence, which we give *in extenso*, reserving for the conclusion any medico-legal remarks that may occur to us.

NARRATIVE OF THE CASE.

Buranelli was born in the town of Ancona, and apprenticed there as a boy to the trade of a tailor, but this pursuit, it appears, he soon abandoned for a military life, having entered the army of the Pope, in which he served, and was promoted to the post of brigadier of dragoons, some minor commission in the service. While on duty with his regiment in Rome, he was introduced to the notice of the late Thomas Stewart, Esq., of Drummond Castle, Perth, whose service he was induced to enter as valet; his brother, Antonio, being in the situation of cook to Mr. Drummond at the same period. In this employment he remained for about four years, till the death of his master in 1846. And as his after destiny seems to have been singularly influenced by circumstances growing out of this engagement, a glance at the romantic incidents connecting him with the Stewart family may not be uninteresting.

Mr. Stewart had embraced the Roman Catholic faith, and become a monk of the Benedictine order, being known in Rome as the Chevalier Abbé Stewart. In 1846, he went to a village on the sea coast, between Ancona and Senigaglia; and while there, allowed Luigi to pay a visit to his mother at her home in Ancona. During his valet's absence, the Abbé was one day, while bathing, assassinated by one of the natives, whose cupidity was probably excited by rich rings which Mr. Drummond was known to wear. The assassin, a youth of nineteen, was subsequently tried and convicted. On Luigi's return, he found his master dying; and the singular power the unhappy Buranelli possessed of exciting feelings of kindness and affection in all with whom he associated here became manifest in the act of the dying man, who, calling for pen and paper, wrote in Italian—"Dear Brother, I recommend my most faithful valet, Luigi Buranelli—" Then becoming weaker, he added, in English—"Dearest George, I am dying"—adding, in Italian, "Signor Messurier, pray send this to my brother George." This was the Abbé's last act, and in a few minutes after he expired. The Signor Messurier named was Mr. Drummond's banker at Ancona, and by him the copy of the last words of the dying man was forwarded to the brother to whom they were addressed, and from whose letter in reply, dated 4th August 1846, the following is an extract:—"I shall *faithfully* attend to the wishes of my dearest brother, whether expressed or implied, to the best of my power. Pray give this assurance, which I make to yourself, also to poor Luigi, with my best wishes to him, and also to Antonio, whom I know." In another letter to Mr. Le Messurier, he again writes: "In the will of my brother, Luigi is not mentioned, but in compliance with my dying relative's request, I shall charge myself with a provision for him, not equal, however, to Antonio's, and this I beg you will tell him." In another letter of September, to the same party, he writes: "I propose settling on Luigi Buranelli an annuity for his life, to be void, however, when he is paid 300*l.* I shall write again on the subject." Again, in November following, he writes to M. Le Messurier: "Mr. Wedder-

spoon, my solicitor, will communicate with you himself in a few days as to the sums he is to transmit, both on account of Antonio's annuity and the half-yearly 10*l*. I have assured to Luigi Buranelli."

An annuity of 50*l*. yearly was settled by the Abbé's will on Antonio. The bequest to Luigi being, however, of a different character, he mentioned to the brothers of the deceased, William and George, on their visiting the place of their relative's assassination some time after the sad occurrence, that he had received his first half-year's annuity, but had no document to show for its continuance; on which Mr. William Drummond repeated to him the words the Abbé had written, and presenting him with the family seal, told him as long as he kept that he had nothing to fear. The annuity continued to be regularly paid till the death of Mr. George Stewart Drummond, in Dec. 1847, when the executors, being unable to find any document authorizing the continuance of the payment, did not feel themselves justified in continuing the annuity. The cessation of payments induced Buranelli to apply to her Majesty's consul for the Roman States, Mr. George Moore, who, after some ineffectual efforts on the subject, gave the following certificate to Buranelli, who determined on coming to England, in furtherance of his claim on the representatives of his late master:—

"At the request of Luigi Buranelli, I hereby certify, that to my knowledge he served the late Chevalier Abbé Stewart for the space of about four years, faithfully and honestly, to the entire satisfaction of his master, in the capacity of valet.—GEORGE MOORE, her Britannic Majesty's Consul for the Roman States. Ancona, 27th June, 1849."

Buranelli shortly after sailed for England, leaving his wife, Rosa Colucci, whom he had a short time previously married, in the care of his mother in Ancona. On his arrival in London, he stopped in Privatelli's Hotel, where he acted as waiter for some five months. During this period, he received a letter from Mr. Moore, from Ancona, announcing the receipt of the pension from John, the heir of Mr. George Drummond Stewart; and in reply, instructed Mr. Moore to pay the money to his (Buranelli's) wife, to enable her to join him in England, which Mr. Moore accordingly did. Miss Le Messurier, the banker's daughter, being at this time about to proceed to England, Buranelli's wife accompanied her. On their arrival in London, the wife found her husband lodging in a house in Great Pulteney-street, Golden-square, in another portion of which, at the same time, were residing Mr. Latham and Mrs. Jeans, who were living there together as man and wife, known as Mr. and Mrs. Lambert. It was here the unfortunate acquaintance commenced which terminated so fatally to all concerned.

Buranelli's affection for his Italian wife appears to have been very great; and from her death, which occurred shortly after her arrival in London, the marked change of character became manifest, which kept steadily progressing till it resulted in the fatal act for which he was executed. Mr. and Miss Le Messurier appear to have felt a strong interest in the unfortunate couple, and the following letter, found by the police among Buranelli's papers, conveys some idea of the character of the man:—

“23rd May, 1851.

“Dear Luigi,—I have received with much pleasure yours of the 21st instant. It is several weeks since that Signor Mattoni paid unto me the remainder of the money which I paid for the burying of your lost most precious Rosa. I have given him the receipt for the full amount, with the obligation which you then put in my hands as a security to repay me. I am not yet starting, but when I shall return to Ancona I will not fail to do what you requested me. The resolution which you have taken to assign a part of your pension to your sister Amelia and to the parent of your deceased wife does you great honour. Wishing you every success in your career, I salute you.

“EDWD. LE MESSURIER.

“United Service Club, Charles-street, Pall Mall.”

At the period of his wife's death, Buranelli was in the service of Mr. Crawford, a gentleman residing in Grafton-street, and his mild and amiable character here, as elsewhere, drew around him the sympathies of all who knew him. His first great change of character was here exhibited by his inconsolable grief, his taking possession of a picture which he fancied was his wife's likeness, over which he would cry continually, and the idea, repeatedly expressed to his fellow-servants, “that all his troubles came on a Friday.” After remaining six months with Mr. Crawford, whom he left on account of a change in his domestic establishment, not from any fault, he entered the service of Mr. Joyce, where he acted as valet for another six months, at the end of which time he received the following certificate of character:—“I, the undersigned, declare that Luigi Buranelli has been in my service, in the capacity of valet, for the space of six months, and that during his stay with me I was fully satisfied with him in every respect. The only reason he quitted my service was the climate of the place, which did not agree with his health. In faith of which—C. JOYCE.”

While in Mr. Joyce's service, he became acquainted with Martha Ingram, a fellow-servant, to whom he was soon after married; and as her friends resided at Penshurst, in Kent, the newly-married couple decided on settling there, he intending to follow his original business of tailor as a source of living. Not succeeding in establishing a business of his own, he got employment from a Mr. Eagleton, a tailor in the village, with whom he worked during the whole period of his residence at Penshurst; and, as usual, his kind and gentle nature procured him the regard of all who knew him. The following letter of Dr. Baller to Mr. Henry, immediately after the murder, is indicative of the man's mental condition while in Penshurst, where his wife died in child-bed in the spring of 1854:—

“Penshurst, January 17, 1855.

“My dear Sir,—I will not delay my reply to your inquiries respecting that wretched man Buranelli. Some few years ago, when in service in London, he married a young woman whose friends reside in this neighbourhood, and he was induced, in consequence, about three years since, to settle in Penshurst. I became acquainted with him (the

prisoner) soon after he came here, and attended him on two or three occasions for hæmorrhoids (piles) and derangement of the liver, when I thought him a mild and inoffensive respectable man. Early in the spring of last year he lost his wife, to whom he appeared tenderly attached, somewhat unexpectedly, in consequence of a severe and protracted confinement. He was evidently deeply affected at her loss, and became melancholy and extremely depressed, but occasionally working at his employment. Soon after this, he applied to me with an abscess at the verge of the anus, which I opened for him, and found a fistulous communication with the bowel. At this period he became very anxious about his health, magnifying the slightest symptom, and under a strong apprehension that he should not recover. He was, however, induced, after some persuasion, to allow me to operate upon him for the fistula, when I also removed two small external piles. After the operation he became very irritable and impatient, removing the lint and tearing away whatever dressings I applied, nor could he be persuaded by scolding or entreaty to remain quiet. The consequence of this was, that the healing of the fistula did not go on satisfactorily, and eventually his conduct became so violent, and his temper so ungovernable, that neither I nor the people with whom he lodged (kind and attentive as they were) could do anything with him. He then placed himself under the care of a surgeon at Tunbridge Wells, but soon after was induced by his friends to get admission into the Middlesex Hospital. Such is the history of the poor fellow since he came to Penshurst; and although I could not, from my own knowledge of him, pronounce him absolutely insane, yet I believe his mind to have been in such a condition as to be easily thrown off its balance by any powerful excitement. I feel much interested in the unhappy man's fate. I am, &c.

"J. H. BALLER.

"To Mitchell Henry, Esq., 5, Harley-street, London."

The several witnesses who gave evidence at the trial as to his state of mind while in Penshurst, not only fully corroborate the statements of Doctor Baller on this point, but proved, further, that after his second wife's death, his depression and melancholy were painfully manifest. That he continually talked of suicide and death, and that a little boy had been employed to stop with him in his room, it being thought unsafe to leave him alone. That he wanted the woman, with whom he lodged, to purchase laudanum for him, and that he believed Doctor Baller wanted to poison him; and, in order to detect poison in the medicine sent by the doctor to him, he was in the habit of putting a halfpenny into it, and pointing to the effects of the poison upon the copper. That, on one occasion, he left the house where he was lodging, declaring his intention of drowning himself in the river; and the witness, Cook, stated, that fearing to leave him alone, he accompanied him, he crying so loudly while on the road, as to attract every one's notice, till he left him with John Simmons, Buranelli's brother-in-law. These facts, unshaken by a severe cross-examination, bring the wretched man down to the period of his admission to the Middlesex Hospital, on the 17th August, 1854.

His condition, whilst in that institution, will be found fully detailed in the evidence given on the trial by Mr. Henry, the surgeon who attended him, by Mary Anne Flower, and Elizabeth Naylor, the nurses of the ward in which he was, and in the statement of Mr. Shaw, who, though summoned by the prosecution, was not examined.

It will suffice here to state, that the proposal to examine his fistula threw him into a paroxysm of terror, expressed with such exaggeration, both of words and manner, as to excite general observation and the laughter of the other patients. All that could be found was a little hole in the skin, at some distance from the anus, which looked like the remains of a suppurated hæmorrhoid. This little bridge of skin was divided, causing no pain, and attended with no more bleeding than would have followed the scratch of a pin. Buranelli, however, continued to insist that his urine passed in quantities through this hole, and perpetually teased his medical attendants to examine the wound, and so distressed the Nurses by his perpetual assertions, that his bed was "swamped" and "swimming;" with water, and entreaties to be taken out of it, that they mentioned the subject to the Matron of the hospital. It appeared, also, that he would lie crying for hours together, complained much of pain in the head, and conducted himself so strangely, that they were led to talk about him to each other and to Mrs. Lambert, the so-called wife of the murdered man, who had accompanied him to the hospital, and expressed her belief that he was not right in his head.

At the expiration of about three weeks, viz., on the 2nd of September, he was discharged from the ward, but permitted to attend Mr. Henry as an out-patient; for that gentleman had been much struck with his gentleness, his great melancholy and dejection, and apparently forlorn condition. He continued in regular attendance as an out-patient down to the very time of the murder; but had no trace of fistula, or any other physical ailment for a period of many weeks, although his delusion as to the flow of water remained as strong as ever.

On leaving the Middlesex Hospital he went to reside in Newman-street, in the house occupied by Lambert and the females Jeans and Williamson, and subsequently removed with them to Foley-place. It appears at this time he intended returning to Penshurst, but through the friendly solicitations of Latham, otherwise Lambert, he consented to occupy a room on the same floor with Mrs. Williamson, at three shillings a week, paying a very moderate sum as his proportion towards the expenses of the table. The singular influence he seemed unconsciously to exercise on all who observed his amiable and gentle nature, here was strikingly apparent. These people knew the condition of his mind. They had tenderly ministered to his wants in the hospital, and pointed out to the nurses his mental condition, and the danger of his being left alone; yet when he was obliged to become an out-patient, from motives the most humane and disinterested, he was invited to make one of their household, and, from his first entering in September, until the day of his final departure from the house in Foley-place, about the 25th of December, there is no evidence to

show that these kindly feelings were for a moment interrupted. That an improper intimacy should arise between him and Mrs. Williamson, a woman separated from her husband, who occupied the other and only additional bed-room, on the same floor where they slept, cannot be matter of much surprise in an establishment under the control of parties in the position of Latham and his reputed wife. And this sin, as it were, of his position, is the only stain, before the murder, on a character more than ordinarily blameless, where all the gentler elements abounded, offering a striking contrast of the rational being compared with the demoniacal fury of the insane murderer, who slew his benefactor sleeping on his pillow, without apparently enough of motive to excite to the most ordinary extent of moderate revenge. The evidence referring to this period of his career, as adduced on the trial, is deserving of attention.

In order to make this narrative clear, it should here be remarked, that the arrangement by which Mr. and Mrs. Lambert, Mrs. Williamson, and Buranelli resided together as one household, continued until the 28th of December last, when the latter left the house by the desire of Mr. Lambert and Mrs. Williamson, on the plea that she was in the family-way by the prisoner. This supposition, however, was incorrect; for there is no evidence to show that the female Williamson was in reality pregnant.

From the testimony of Mrs. Jeans, alias Lambert or Latham, it appears that on the occasion of the last interview between Mr. Latham and Buranelli, on the day of the latter quitting Foley-place, that no anger was manifested on either side. No loud words were heard to proceed from the room where they conversed together; and on Latham's handing to Buranelli the balance coming to the latter, after deducting a certain sum for board and necessities, a friendly altercation took place, the one wishing to pay more, and the other refusing to receive it; the scene terminating in words of mutual kindness, and a friendly parting shake hands. The evidence of Mrs. Williamson confirmed these facts, and disclosed, that during the period of his residence in the house, she had gone with him several times to the theatre; on which occasions he used to talk to her of committing suicide, of his appearing to her after his death, and being under the idea that he was one of the beings represented on the stage, she remonstrating with him in a religious tone on the wickedness of his words and fancies. She also stated that in two of the letters he had sent her, after his leaving Foley-place, that he begged to be kindly remembered to Mr. and Mrs. Lambert. With reference to the pistols, it appeared he went into the shop of a dealer in second-hand articles and purchased an umbrella, rain at that time falling, the buying of the pistols being an afterthought, no ammunition having been sought for until the day before the murder, when, on passing through Oxford-street, he observed fire-arms and bullets in a window, and went in and purchased some balls, which he next day fatally used in the commission of the murder. Elizabeth Gurney, with whom he lodged for a short time preceding the murder, proved that for some days before that occurrence he was wild in his manner and complaining of pains in his

head, and that on the Friday night before the fatal event he went, without any apparent object, frequently in and out of the house, would have no fire, though the weather was very cold, and after his retiring to bed she heard him talking so loudly as if to other people, that she opened his room-door and went in, but found him alone, pacing through the room and flinging his arms wildly about. The Italians who had seen him for several days before the murder, deposed to the wildness of his manner and irrational, unconnected discourse. Conforti, the keeper of the hotel where they were in the habit of meeting, proved that, for about a week before the murder, Buranelli had taken his meals at the hotel, eating very little, and appearing in a very melancholy and desponding state, causing the witness to remark to those around him that he was mad. On the Saturday, in the presence of several persons, he declared his intention of starting for France as soon as he could get his passport, and during the evening complained frequently of illness, making an appointment to meet there on the Monday following, at one o'clock, a medical friend of Conforti's, who came at the hour appointed, the murder having taken place in the meantime. In this state of dejection and restlessness he remained till two o'clock on the Sunday morning, when he went to his lodgings in Newman-street, and in a few hours after committed the murder.

The subjoined statement, made by the prisoner to his solicitor, Mr. Keighley, gives a clear and most interesting account of the circumstances immediately preceding the murder. There is every reason to suppose that it is strictly accurate, and in most of the important points it is corroborated by the testimony of the witnesses on the trial:—

THE PRISONER'S ACCOUNT OF THE MURDER.

On Thursday evening, the 28th December, 1854, Mr. Lambert requested me to leave the house, No. 5, Foley-place. I asked why; he said, "You have not respected my house." I said, "Who told you that?" he said, "Mrs. Williamson," and then Mrs. Lambert and Mrs. Williamson came into the room; in the presence of all three I asked Mrs. Williamson if she said that. She covered her face and said, "Yes." Mr. and Mrs. Lambert then both said I had disgraced their house, and I said, "Excuse me, but I have not disgraced this house—it occurred in Newman-street." Mr. Lambert said, "You must leave my house to-morrow." I said, "Pray do not expel me from the house in this manner, it would look as if I were a thief; what will Mattoni think? If I have done wrong, I shall repair my error." I requested to be allowed to remain for a few days, because it no look well before the servant and before my friends. He said, "You have no excuse, you must begone;" and after this he said, "Look here, one man come here every day, and talk about the fistula, he is not well." I broke directly the conversation, and said "Don't insult me;" and he got up, he said, "What, do you think I fear you." I, myself, say, "Excuse me, you no fear me, I no fear you; and if you do like that, I go to-night instead of to-morrow." He said, "That is the best—go directly." Now I said, "You put down what I ought to pay (for I then had not spent all the 10*l*. I had received of my pension on the 5th December, 1854, and which 10*l*. I had given Mr. Lambert to keep for me), he said, "That is the best plan," and then wrote out the account on a piece of paper; he said, "You see I charge you no more than I am out of pocket." I said, "I wish you to charge exactly what you think proper;" then he gave me four sovereigns and five or six shillings back out of the 10*l*. note, and Mrs. Lambert gave me back a diamond ring she had to sell for me. I say now, "I want you to allow me to say a word to Mrs. Williamson,"

he say, "No, it was quite sufficient what you have done." I said, "If you don't allow me this, I sha'n't go;" he said, "Then he would get a policeman." I said, "Mind what you do, because you might be taken yourself, because I know very well what you have done." Mr. Lambert significantly looked into the face of Mrs. Lambert for one moment. He said, "Well, what do you want to say to Mrs. Williamson?" I said, "Excuse me, I've something private to say to her." He say, "Very well, be quick." Mr. and Mrs. Lambert left the room. I say to Mrs. Williamson in private, "I very sorry what you have done, and I fear you make me a sacrifice. I said, I wish you may continue well. If you fall ill here, take the four pounds and the ring." I put them in her hands as well as the ring. Mrs. Williamson said, "I will take the ring, for I've one other of yours, but I sha'n't take the money, take care of yourself," she say, "if you go into the country, I promise to write you;" and I said, "I stop for one week here in London before I go into the country. I don't know where. I pray to see you once more." Mrs. Williamson say, "Well, I see by-and-by."

Then Mr. and Mrs. Lambert came back. I say, "Well, I've done; I much obliged to you. Now I go and take my bag, and allow me to take one of the servants," and I take Mrs. Mattoni's sister with me up to my room, and I let her look at all my things, and I gave her back one shirt which Mr. Mattoni lent to me. She say, "You going, Louis?" I say, "Yes, I going." She say, "Why you going to-night?" "Why," I say, "if you want to know, Mr. Lambert sent me away." She say, "I very sorry." This done, I go down stairs; I say, "Good-bye, Millie, give my respects to your sister (Mrs. Mattoni) when she came, and if you see Mr. Mattoni, do the like." I get to the door, I heard Mr. Lambert say, "Come in." I say, "I going, sir." "I very sorry, but excuse me," he say, "you know why; well, this is the best plan; I wish you may come well." Mrs. Lambert said the like, and I shake hands with both. I say to Mrs. Lambert, "Mind Mrs. Williamson, because I leave her in your hands in good health." She say, "All in good health; I hope you'll come well." Mrs. Williamson was there; I said, "Take care of yourself, remember what I told you. Good-by."

Lambert then went with me to the door. I said, "I got here my things, Mrs. Mattoni's sister has seen that all belongs to me." He said, "I'm sorry you do so, because I no suppose nothing bad of you." I shake hands again, and we part, bidding each other good night. After that, I no more saw either Mr. Lambert, Mrs. Lambert, or Mrs. Williamson, till I killed him.

Then I go to Mr. Brunetti's, 71, Newman-street; he say, "What the matter?" I say, "I left Mr. Lambert." He say, "Why?" I say, "I've a little question there." He said, "Oh, I thought so with those people." He keep ask some questions. "Well," I say, "I've some insult; but all right now." I said, "I'll leave my carpet-bag, if you will allow me, and go and look for a lodging." He said, "Yes." I go to seek for a lodging. I know not where to go. I wander out, and I found myself in Great Pulteney-street, and saw it was the same place where my Rosa died.

I then go in one public-house in the top of Great Pulteney-street, coffee-house next door. I ask for one bed. He say, "I think next door at the coffee-house has one." I say, "How much?" He say, "One shilling." Which I gave. I slept soundly, and breakfasted next morning; then go back to Brunetti's for my bag. I say, "I want to lodge." He say, "Come with me." He went to 63, Newman-street. I took the room at 5s. per week. I left the bag. I say I come in to-day.

I sleep at home every night, till the Sunday (the 7th January). I didn't go out much. Major part of time at home, for I didn't feel well. The first Saturday, I say to myself, "I don't know what to do, I feel so queer,—very ill all over." I get up late in the morning. I feel so queer myself, I don't know what to do. I go out on that Saturday to Brunetti's about half-past one. I said, "I no feel well." He said, "What is the matter?" I said, "I hurt in my head, and my heart feel heavy." I say, "I want to go to some Italian hotel for society." He said, "I take you to Conforti's; he is my friend." He went and said to Conforti, "Take care of him; he is not well."

The next day, Sunday, I feel so queer, and I ask to see the landlady before break-

fast. I said to her, "My head is so bad. Light the fire." I gave her 2s. 6d. for tea, sugar, &c. I got up, I remember, and began to reflect, and thought of the way in which I had been sent away. I say, "No matter,—I'll write Mrs. Williamson."

I pass two or three days. I asked the landlady if she knew anybody who would write a letter for me in English. She say, "Oh, yes, sir, there is a very good man down stairs." I say, "I am obliged, I thank you." After I remember myself, that no do. I'll try myself. I remember I write a letter (which I sent by a boy I found in the street) to Mrs. Williamson. I said in my letter, "Pray you come and see me at any place you appoint; I want speak particularly to you." The boy took the letter. I had no answer. I wait another day. No answer. I reflected again. I could not see why I had no answer. Sometimes I said, "I will go and see her, to see why I've no answer to my letter." Sometimes I said, "This no do."

I talk with Conforti about my complaint. I mention if he knew somebody understand this complaint. He say, "Yes." I see one doctor. He come here very often. He asked my complaint. I say the climate. I say, "What you think of France?" He say, "Yes." I say, "Yes, I think I go there by-and-by." I go home. I got in my mind every time this Mrs. Williamson. I determined to go to France. "But before I go," I say to myself, "I will give Mrs. Williamson my likeness, and if I don't get well in France, I kill myself"

One day (the 1st January) I had my likeness taken in Oxford-street.

One day (the 2nd January) I go out in Tottenham-court-road. It rain. I ask man in shop if he had an umbrella second-hand. He said, "Yes." And I pay 1s. for it. Then I see the pistols. I say to myself, "These are the things just suit me, because I don't get well, I can't work; I kill myself." I bought the umbrella of the Master, who sent his assistant to me about the pistols. He asked, I think, 16s. I said, "That's too much; I think my friend that's going to Australia wont like to spend so much." I said my friend, for it flashed through my mind that as Barthelmy, a Frenchman, had lately committed a murder, that if I (an Italian) asked for pistols for myself, they might suspect something, and send for the police. I offered 12s. He said he would not let me have them for that, and I said, "If you wont let me have them for 12s., I wont have them at all." I took up the umbrella to go. When he saw this, he said, "Here, take them; you are lucky." To this I say no one word, but I say to myself, "Perhaps they take away my life." I go home. I say to myself, "I got the pistols now. This is the time to decide on my life." I put them into my bag, and leave them there. The next day, I write another letter to Mrs. Williamson. I say in it I never received an answer. I pray you give me an answer before you make me sacrifice. (This letter was interspersed with expressions of affection.) I said I was going to France, and begged of her to meet me at the church in which Mattoni was married, behind Foley-place; and I sent a boy with this letter. I went to the church; stayed an hour. Mrs. Williamson did not come. I go home again. Brunetti inquired of me as to my health. I complained of my head, and said I did not know what I should do. He said, "Mind what you do." I said, "I am sorry what Mr. Lambert has done with me; it troubles my mind all the day." He said, "My wife says you have something on your brain."

From inquiries made of the prisoner, it appears that for three or four days before the eventful Sunday, he had been, as he expresses it, "poorly in his mind;" and it was about this time that he began to write those extraordinary productions which were found in his lodgings by the police, and copies of which are appended to this statement.

On the Thursday or Friday night, I am not sure which, I commenced to write in that little book. I wrote what is there contained, because I had the intention of killing myself, and I wished to make the motives of my suicide known.

I wrote a third time to Mrs. Williamson, I said that I was very sorry she had

not replied to me. I had written two letters to her and got no answer, and I said that for fear that she might not have received my letters, I would repeat the same appointment that I had made in the others, and ask her to meet me at the Church at eight o'clock that night. I urged her to come and meet me because I was going to France. There were many expressions of love also in that letter. I think that letter was written on Friday. I sent that letter by a boy, and I again went to the Church that evening. No one came. I wrote the last letter to Mrs. Williamson on Saturday afternoon. I said that I had been writing to her several times but had received no answer, at which I was very much surprised and grieved. I prayed her to allow me to see her, and I appointed the same place again ; I said she had nothing to fear, that I did not want to murder her, but that I wished to see her most particularly, because on Monday I was going to France. I mentioned my feelings of affection for her, and I begged of her to give my respects and kind regards to Mr. and Mrs. Lambert. (I had said the same in my first letter.) After writing this letter it occurred to me that perhaps she might never have received my previous letters, perhaps they might have been intercepted, or perhaps, the boys whom I had sent had never fulfilled their messages, and I thought that this letter I would make sure of myself, so I went myself to Foley-place, that Saturday evening, with a letter in my pocket a little before dusk ; just as I reached Foley-place, I heard some one calling my name, and on turning my head I saw Mrs. Mattoni's sister, who acted by way of servant to the Lamberts ; and she said to me, "Luigi, why are you going this way?" I said, "I am going to Regent's Park, to take a little air, and that I thought that was the way." She said, "Yes, it was the way ; and she asked me how I was?" I said, "I don't feel well at all, Nelly. I then asked her how she was herself ; and I asked after Mr. and Mrs. Lambert, and I particularly inquired after Mrs. Williamson? She said, "Mrs. Williamson has been very poorly indeed, but she is now better." I asked, "Is she well enough to work?" She said, "No, but she has got out of bed, and is just now sitting by the fire doing nothing." I said, "Give my compliments and kind respects to all, and tell them that I am not well." When she parted from me I said to myself, "Now this is just the time for catching Mrs. Williamson. So I called a boy that was passing and told him I would give him twopence if he would take a letter to No. 5, but he must mind what I said, and that was : "You go there and ask for Mrs. Williamson and give this letter into her hands, and say that you are to bring back an answer, and that if there is no answer sent to bring back my letter." The boy went into No. 5, and stopped very near a quarter of an hour, when he came back and said, "that the message was, that Mrs. Williamson can't give an answer because she is in bed very ill." I told him "that he ought not to have left the letter," but gave him his twopence, and then went home. After I got home I felt very disturbed and depressed in mind ; I considered to myself that it seemed as if they were making game of me, because Mrs. Mattoni's sister said that Mrs. Williamson was better, and was sitting up at the fire, and the boy had been told that she was so ill in bed that she could not give me an answer. This put my mind very much out, and I went out in the open air to relieve myself, I walked along Oxford street till I came to a gun shop, where I stopt for a moment and saw balls in the window. I thought to myself that I would go in and purchase them for my pistols. I asked if "he had got pistol balls?" he said, "he had, and what size would I want?" I said "that those that were before me would do," and I finally purchased half a dozen of that size and half a dozen of a smaller size. After that I bought a knife and then I went to Conforti's café.

I slept at Conforti's until about 1 o'clock that night, Saturday, or rather Sunday morning. On my return home I went to bed and slept soundly. I got up about 8 o'clock, but as if some irresistible force pressed upon me I returned to bed again, but soon afterwards got up, shaved myself, washed and dressed myself. I had no thought of shooting Mr. Lambert at this time, but my eye fell upon two letters that were lying upon my dressing table, and that recalled to my mind what had taken place the previous night about my letter to Mrs. Williamson, and I said to myself, "I will go there and see whether they are mocking me. I will go, and get back my letters."

The prisoner then loaded the pistols, and proceeded towards the

house. The circumstances attending the commission of the crime appear by the depositions of the witnesses.

The documents before alluded to as found by the police are three in number, each written in Italian: they consist of two letters and one written statement in a memorandum-book.

The first letter, viz., that addressed to Mr. Conforti, the keeper of an Italian café, which the prisoner had frequented after he left Mr. Lambert's, is thus translated:—

"ITALIANS.—I beg of you to pardon me, I am a dishonour to you, I dishonour our beloved Italy, but it is not entirely my own fault; from the first moment I arrived in the land of exile, or rather the land of grief, I have not had one hour's peace. Here I am insulted by the name of assassin. I must act, I am a Roman, and am an Italian; enough, in one of my memorandum-books you will read my motive and also a part of my love.

"Remember my name to all my friends, and dying, I say, Live Italy!"

LUIGI BURANELLI.

The second letter, namely, that addressed to Mrs. Streatfield, a lady at Penshurst, who had been very kind to the prisoner, is thus translated:—

63, Newman-street, Oxford-street,
The Night of January 4th, 1855.

"MOST NOBLE LADY,—Doctor Baller has led me into this state of desperation; I hate him; in the sight of God, he has caused me to lose my soul; my horrid crimes has been occasioned by many insults, which, after the saying of the Doctor, these Lamberts offered me. I shall better make myself understood. If Dr. Baller had not performed a bad operation and opened new wounds, I should not have been obliged to come to London on account of my health. I was compelled to remain under these flatterers, the false Lamberts. When I came out of the hospital, I really wished to return to Penshurst, but these Lamberts having seduced me with false flattery, kept me where I had the misfortune to fall in love with a woman chosen by the said Lamberts. At last, afterwards, the woman found herself in business with the Lamberts, and seeing me in a bad state of health, they have made their utmost to send me out of the house with false pretexts. As Lamberts have no decorum and endeavoured doubly to degrade me; he succeeded, now he calls me by the name of assassin. I do not think, however, that, on account of having seduced a woman who has much experience of the world, a man may be called with the name of assassin, and as now my life is nothing, and here in England all calling me an assassin, then as an assassin I am compelled to act. Lady, I do not add anything to this; I beg pardon for the trouble which I have given you till now, at least. I recommend my dear daughter Rosa, and think, Oh Madam, that my daughter had a father assassin, my daughter is innocent. A kiss from me to the daughter. I recommend to that great God my soul. I die content.

"Madame,—I beg to present my last regards to all those who esteem me; I pray you all to pardon me as I pardon Mr. Baller as my executioner.

"Madame,—I beg to open eyes over that Doctor, and then there will be more religion. Meanwhile, believe me, yours, Oh most esteemed lady,

"Your most humble and most devoted servant,

"L. BURANELLI."

The writing in the little memorandum-book is thus translated:—

The cause of my desperation is the Lamberts. When I left the hospital I wished to return into the country, the Lamberts kept me in London, and with false flattery wrote to my club, giving notice that I and Madame Williamson had become attached to each other. In conclusion, a flame was lighted in our hearts

which hurried us onward to the point of an impropriety, though Madame William was both an experienced and capricious woman. In that moment of love our reason deserted us, and she swore to be true to me many more times than if I was her husband, and I, for my part, the same. Our love was mutual from the first, and cost the honour of Madame Williamson; she, being alarmed at her situation, discovered all to the Lamberts, who immediately began to meddle in the business, and Mrs. Lambert discovered to Mrs. Williamson a purpose of her own. As the state of my health would not allow me to go out of England, I remained in London, and my affection for Madame Williamson increased. At this time I found that M. Kotozd and M. Yambelli had become through the Lamberts equally attached to Madame Williamson. When the Lamberts found that they wished to take her out of England, they attempted directly to cause a separation between them. The Lamberts also prevented the husband of Madame Williamson coming back to her; and with regard to myself, Madame Williamson confessed to me that they always spoke disparagingly of me, and attempted by every means to cause the greatest disagreement between us; and they succeeded to the extent that Madame Williamson told me she wanted to love me no more. She also told me that Madame Lambert had promised to give her a sweetheart,—a Sardinian young man, who was to be lodged in the house. When Mr. Lambert did know of my accident with Madame Williamson, he came to me, and acted as if I had been a thief and an assassin, expelled me from the house, and having no regard to my state of health. Upon this, I called Mr. Lambert a ruffian and a thief, and I can prove that, as he let his apartments to a certain Mrs. Roberts, first prostitute of Regent-street, who, to my knowledge, kept two gentlemen with her till daybreak; and I will show him to be a thief, as he robbed a golden bracelet and a ring, which he says he left on a bed belonging to Mr. Smith, who resides at 35, Newman-street, Oxford-street. Mr. T. and Madame Williamson are witnesses of the theft. I say again, Mr. and Madame Lambert are in effect two ruffians and two thieves. It was not enough for them to have had the satisfaction of expelling me from this house, but they said to everybody that I was a rogue, and a thief, and an assassin, and all the worst calumnies that could be uttered they have applied to me. Ah! I who am the offended, who was forced on to love, for which I am now suffering, and to be insulted for it, abandoned by my sweetheart! I lost my reason, and became a madman. I resolved to destroy myself, but before doing so, I said within myself, I will see those who have deprived me, those who have caused me to lose entirely my senses. I resolved to speak to the Lamberts, and after that to die in peace. Oh, my brains! I lost myself. God forgive my excess! I am lost! I am a dying, desperate man! God forgive the great many faults of which I have been guilty! The Lamberts have made me an assassin. I recommend to you my daughter, because the little one is innocent. I am a Roman and an honest Italian, as you will perceive by my certificate. Since I am in England, they call me thief and assassin; by doing so, they cause me to act as such. I shall be able to say that I have been assassinated by Dr. Baller, of Penshurst, of Kent. Open my flesh after I am dead, and you shall certify how I have been treated. Yes, open my lacerated flesh, and you will be astonished. If I have done wrong, it is the law that must punish me, and not the doctor nor the priest. Oh, yes, you did assassinate me, and you have occasioned new crimes. You have my life; what do you want more? Oh, God! pardon in this horrible moment. I die content.

“LUIGI BURANELLI.”

The state of the prisoner's mind up to almost the very moment of his firing off the pistols, is shown by the statements made by Conforti and the Italians who frequented his house:—

Conforti says that he knew nothing of the prisoner till about seven or eight days before the killing of Mr. Lambert. During that period he frequented the house for his meals, he paid for all he had, and he noticed how little he ate, and how gloomy and desponding he appeared.

The prisoner left an impression on the minds of him, Conforti, and the other Italians who frequented his house, that he (Buranelli) was not right in his head, he

told Conforti he was persecuted, that he had great differences with somebody, which he alleged was the cause of his despondency ; another time he would say he was very ill, that he was ruined by the doctors, that this climate was killing him, and that was the reason of his thoughtfulness ; he used to say one thing, then another of quite a different nature.

On the Saturday evening preceding the fatal Sunday, the prisoner said, in the presence of Conforti and four other Italians, that he wanted to go to France, that he fully intended to go there, and would start as soon as he could get a passport. So strange was his conduct and so vague and contradicting his remarks, that on that evening Conforti said to the Italians present, " Oh, never mind him, he is mad."

Santi Angelo, who frequents that house, recollects Conforti using that expression on the night in question.

The trial took place at the Central Criminal Court, on Thursday, April 12th, 1855, before Mr. JUSTICE ERLE.

Messrs. BODKIN and CLARK conducted the prosecution, Messrs. M'ENTEER and LE BRETON the defence.

The prisoner, Luigi Buranelli, aged about thirty-two, was indicted for the wilful murder of Joseph Latham. For the prosecution the first witness called was Sophia de Veaux, a servant, but as her evidence merely corroborates that of the next witness, Mrs. Lambert, or Jeans, it may be omitted.

MARY ANN JEANS deposed. I am a widow. I had been living with Mr. Latham, as his wife, for fourteen years, before this unhappy event occurred ; we passed as Mr. and Mrs. Lambert ; before we went to live in Foley-place, we lived in Newman-street ; we occupied the upper part of the house—the prisoner lived in that house, I think for five or six weeks ; he was an acquaintance of Mr. Lambert's for five years—he had been some time in the country, but I should think he had been in London about four or five months altogether, with the time he was in the hospital, and the time he was at our house—I do not know how long he was in the hospital ; it was the Middlesex Hospital—when he came from there, he came to live with us in Newman-street ; he was an inmate of ours, and associated with us as part of the family—we allowed him to take his meals with us, and he hired a bed-room in the house—he continued in Newman-street till we moved to Foley-place, and he moved with us—Mrs. Williamson was lodging in Newman-street, not as part of our family, she had her own apartment—she is a milliner—she also moved to Foley-place when we moved—in Foley-place, Mrs. Williamson slept in the upper back room, and I and Mr. Lambert slept in the back parlour, on the ground floor—the prisoner slept on the second floor—for about a fortnight he slept in the next room to Mrs. Williamson, on the third floor ; but then he removed down on the second floor—there are four rooms on the upper floor—the prisoner left the house on 28th December.—I believe he is by trade a tailor ; he had not much to support himself during the time I knew him ; but Mr. Lambert allowed him to live there, and gave him what he could afford to give him, which I think was about three shillings a week—he was always an idle, lazy man, I believe ; he would never do anything—the reason of his moving from the upper room to the lower one was this ; as we gave him his room for nothing we did not charge him for it, and the room on the second floor we thought we could not let to any one else, and as we gave him his room we thought he might as well sleep in the room which we could not let to any other person—he ceased to live there on 28th December, by the desire of Mrs. Williamson, wishing that he should not continue there—I had not the least idea that any intimacy had arisen between him and Mrs. Williamson, not until after he was gone from the house—it was Mrs. Williamson's desire that he should leave ; Mr. Lambert was the one that mentioned it to the prisoner—after he left he did not come to the house for any purpose until the morning in question ; but he sent a little boy twice with two letters to Mrs. Williamson—I did not know that little boy—I believe he did not wait for an answer—that was all the communication he had with the house after he left, to my knowledge—on Sunday morning, 7th January, I was sleeping in my bed-room on the

ground floor—Mr. Lambert was in bed with me—our bed-room door was not fastened inside—I was awake when Buranelli entered the room ; I had been awake some time—I heard the ring at the bell, and heard the door open, and heard him speaking to Mrs. De Veaux—I did not hear her go down stairs—I saw him enter our room—the bed was just behind the door ; the door opened on the left hand, and the bed was on the left hand side—a person coming into the room, if he walked straight from the door would get to one side of the bed—that was the side on which Mr. Lambert slept—when the prisoner opened the door and came into the room, I saw that he had a pistol in his hand ; I only saw one, he had the other hand behind him—he said, “Mr. Lambert, Mr. Lambert !” and instantly shot him—he was quite asleep—the prisoner was well aware that Mr. Lambert slept very sound, and always laid till late in the morning—he died instantly upon receiving the shot—I at first pulled the clothes over my head, and then I jumped out of bed and ran round to see if I could get hold of the other pistol—I went towards the prisoner—I saw him change the pistol he had discharged into the other hand, and take the loaded one into his right hand—he did not say anything to me as I approached him ; when I got quite close, going to take the pistol, he instantly fired—he was standing close by the wardrobe, about one or two steps from where he shot Mr. Lambert, and he was coming towards me—he was holding his arm up, with the pistol in his hand ; I saw him raise his arm—the ball of the second pistol took effect in my arm and neck, and I am still labouring under the effects of that ball—the prisoner instantly left the room, and went up-stairs—I cannot tell whether I fell or not.

Cross-examined by Mr. M'ENTER. Q. Did you observe whether he was excited when he broke into your room ? A. No ; I did not perceive that he was the least excited in the world—he said, “Mr. Lambert, Mr. Lambert !” but not in an excited manner at all ; he did not appear to me to be at all excited—I should think it was within two or three minutes of his speaking to Mrs. De Veaux in the hall that he opened the door and fired the shot—he had to shut the door a little way before he could get to Mr. Lambert's bed ; that was the only interruption that occurred upon his opening the door, and he immediately fired—it was as instantaneous as it could be, with the exception of his putting the door aside—Mr. Lambert had always been very kind indeed to the prisoner—Mr. Lambert sympathised with him during his frequent complaints of illness, and frequently visited him in the hospital, and took him in any little thing which he required—I also did similar kindnesses to him in the hospital—I took him tea and sugar, and any little thing that he required, or money—he said he had something the matter with his inside, but nothing we thought to hurt him at all—he always appeared to be quite well when at home ; in fact, when he was receiving his money from his club ; although he would not work, he could go to the theatre of a night, and stop out till after twelve o'clock at night, which was against the rules of the club—he said where he had been—I am not aware that there are Italian houses in London which the Italians frequent in the evening—it is not my own supposition that he had been to the theatre, he told me so ; in fact, when he came home late he told me where he had been—at one time he had been to see the “Corsican Brothers” at the Princess's—Mrs. Williamson was with him upon that occasion.

COURT. Q. Was that at a time when he was receiving money from his club on account of supposed ill health ? A. Yes.

Mr. M'ENTER. Q. Are you aware whether he received money from any other source than his club ? A. Yes, from Scotland ; from the Stewarts ; I believe that was from being a servant of one of the Stewarts, a priest, in Italy—I believe he received £10 every half year from them—he had left the last £10 with Mr. Lambert—I believe Mr. Lambert kept some of it, which was owing to Mrs. Williamson ; £1 or £2, and I think he gave up £4 10s. when he left the house—he returned the prisoner what was due, after deducting what was owing to Mrs. Williamson, and money that he had advanced to him—I do not recollect the nurse of the hospital making any inquiries whatever of me regarding the prisoner's peculiarities, or his state of health ; she never made any remark—I never heard Mr. Lambert make any accusation against him, or call him an assassin, or a thief, or anything of the kind—the conduct of Mr. Lambert was always kind to him—he appeared to be grateful to me and Mr. Lambert for that kindness—he was always a very quiet man—if he ever accused Mr. Lambert of calling him a thief, a liar, or an assassin,

or anything of that kind, it was perfectly untrue to my knowledge—I do not believe there was any such thing as that—we parted with the same friendly feeling evinced on both sides—he said he was very sorry if he had done anything to annoy any of us, and he wished us good-bye, and left the house quietly.

MR. BODKIN. Q. Was Mr. Lambert displeased when he heard the complaint of Mrs. Williamson, and her wish that he should leave the house? A. He did not seem so very displeased about it, only as Mrs. Williamson desired it, and we were in business together, we thought he should leave; it was upon Mrs. Williamson's wish that Mr. Lambert desired it—he was not so displeased as to be very angry with him—there were no angry words passed between them—I do not know what passed between Mrs. Williamson and Mr. Lambert when she spoke to Mr. Lambert in the bed-room—I suppose he felt rather annoyed—I was not present when anything passed between Mr. Lambert and Mrs. Williamson upon the subject, or between Mr. Lambert and the prisoner, only when he was saying good-bye and he was leaving the house—I never heard Mr. Lambert communicate to the prisoner any complaint that Mrs. Williamson had made—Mrs. Williamson and I were in partnership together in business—at the time the prisoner left I was not in the least aware of any improper intimacy between himself and Mrs. Williamson—I cannot tell whether Mr. Lambert was aware of it—he never communicated to me anything that Mrs. Williamson had said—I am not aware whether he knew of the intimacy or not—I was present when the settlement took place about the money, and the balance was given to the prisoner; it was in the evening, when he went away—Mr. Lambert reckoned it up, because Mr. Buranelli wished to pay for a fortnight's board while he was in Foley-place, and a fortnight's lodging for a room, but previous to that, during the time we were in Foley-place, he did not pay anything for his food or his room, only the last fortnight.

COURT. Q. What did Mr. Lambert decide about it? A. He took one shilling a day for his board, and half-a-crown a week for his bed-room.

MR. BODKIN. Q. Did Buranelli agree to that with Mr. Lambert? A. Yes—he thought it was not enough—he told Mr. Lambert to take more, because it would not pay him, but he said, “No, you have very little money to take away with you.” I believe the settlement was reduced to writing, and I believe Mr. Lambert gave it to Buranelli, that he should look over it and see that it was perfectly correct—he understood it and agreed to it.

The next witnesses were Francis Hayes, the policeman, and Mr. Bridge, the surgeon, who were called to the prisoner immediately after the murder.

The chief value of their evidence depends on the following statement which Buranelli is described to have made to them. He said:—

“I was in Middlesex Hospital some time ago, and being a friend of the Lamberts, they wished me to leave, and to come and live with them at their house, which I did; while there, I became acquainted with a person named Jane Williamson, and in consequence of some difference with her, Mr. and Mrs. Lambert wished me to leave their house, which I did; Mr. Lambert ascertained that Mrs. Williamson was with child by me; he threatened to strike me, and I left the house; I then became desperate from that time; that was last Thursday week; this morning I went to the house, No. 5, Foley-place; when the door was opened to me by the servant, I forced my way into the bed-room, placed the pistol behind Mr. Lambert's head, and shot him; I then shot Mrs. Lambert; I ran up stairs, where I reloaded the pistol, and shot myself, and I hope I shall soon die.”

The succeeding witness was Jane Williamson, a married woman, living separate from her husband, and stated to be in partnership with Mrs. Lambert as dressmakers.

JANE WILLIAMSON. I am a milliner by trade—I resided in Newman-street, in the same house with Mr. and Mrs. Lambert—Mrs. Lambert and I were not connected in business until we left Newman-street—during the time I lived in Newman-

street, the prisoner lived there—he and I became intimate as man and wife ; that had been the case three weeks, I think, before I left Newman-street—we had been acquainted longer than that, from seeing him at Mrs. Lambert's—I think I once or twice went out for a walk with him—I used not to go to the theatre with him before that time—I have been once at the theatre with him ; that was when we were in Foley-place—nobody went with us—oh, I went once before that, with Mr. and Mrs. Lambert and the prisoner—when Mr. and Mrs. Lambert moved to Foley-place, I accompanied them—I set up in business with Mrs. Lambert at that time ; we took the house together, and I slept in the upper room—the prisoner also moved, and slept for a few nights in the room next to me, and then he went down to the second floor—after a short time he left ; I think it was on a Thursday ; in January, I think—I do not remember whether it was in January, or the latter end of December ; it was shortly after Christmas—it was my wish that he should leave—I communicated that wish to Mr. Lambert, and the prisoner left a few minutes after—he told him instantly to go ; as soon as he could get his carpet-bag ready, he went ; it was after tea in the evening—Mr. Lambert told the prisoner why he was to leave—I was not in the room when he told him to leave—I did not hear what Mr. Lambert said to him about his leaving—there was no one in the room but themselves at first—they were in the dining-room ; the ground floor front room—I was called in afterwards, I think by Mr. Lambert—they had been together about five or ten minutes before I was called in—when I went in, Mr. Lambert said to me, “Do you wish Buranelli to leave the house ?” I said, “I think it would be better”—he then said, “I will go,” and he went up-stairs, and got his bag to go—he said he wished to speak to me alone, and Mr. and Mrs. Lambert left the room for a minute or two—I do not remember when Mrs. Lambert came in, but when he expressed a wish to speak to me alone, she was there—after Mr. and Mrs. Lambert left the room, the prisoner asked me to meet him, and I refused—he did not mention any place or time—he had some money, which he offered to give me, but I would not take it, and he then left—when I spoke to Mr. Lambert about the prisoner, I gave him a reason for wishing him to go—I was on the ground floor, and Mr. Lambert called me into the bed-room, and asked me what made me so unhappy ; that was the beginning of it—he had noticed that I appeared unhappy, and asked me that question—he guessed the cause, and I said, “I think it would be better if Buranelli could leave the house”—I told him I thought I was pregnant by the prisoner—it was directly after that that the interview between Mr. Lambert and the prisoner took place—Mr. Lambert seemed astonished at receiving this communication from me—the prisoner was in the parlour, on the ground floor, at the time—Mr. Lambert said he would protect me, and he went into the other room, and ordered Mr. Buranelli out of the house—I remained in the bed-room, whilst Mr. Lambert went into the parlour, until I was called in—I heard their voices in conversation in the interval, but I could not detect the words—I never saw Buranelli after he left that day, until I saw him after he was shot—I received two letters from him ; I showed them to Mr. Lambert ; I did not send any answers to them—I gave them to Mr. Lambert—one I threw away, and the other was burnt—I never received but those two letters from him in my life—the first letter was wanting me to go out ; I forget the exact words of it—he said that he held my honour in his hands, and it was my duty to go out and see him, and he begged I should do so—I sent no answer to that letter—the first letter came, I think, on the Tuesday, and the second on the following Saturday ; that was begging me to meet him at All Souls' Church, in Regent-street, that evening, from eight till ten o'clock, and stating that he was going to Paris—I do not remember whether the second letter alluded to the fact of my not having sent any answer, or taken any notice of the first ; I think not—about an hour before that letter came, an apprentice that I had, saw him in Foley-place, and he inquired of her how I was, and said he was going to Paris, but I received no other communication from him than those two letters—they were written in affectionate terms—on the Sunday morning in question I was asleep in my room, and was awoken by a noise proceeding from the lower part of the house—my apprentice was sleeping with me at the time—my door was fastened inside—I heard some person ascend the stairs, and then try to open the door of my room—I called out, “Who's there ?” the answer was, “Open the door ; open the door”—I asked, “Who is it ?”—I did not recognise the prisoner's voice at all ; he seemed so agitated—he answered, “It is Luigi Buranelli”—

hearing the noise previously, I thought something was wrong, and I said, "Where is Mr. Lambert?" he said, "Dead," and I think he said that he was his assassin, but I am not sure—he then went into the adjoining room—I heard the window thrown up, and I ran across my room, and looked out of the window, and I immediately heard the discharge of fire-arms—my window looks out the same way as the window which was opened—I did not see anybody when I looked out of the window—I did not go into the room—the policeman came up and said, "Open the door;" when I opened my door, I had a view of the room into which Buranelli had gone—I then saw him lying on the floor, and bleeding from a wound in his face.

Cross-examined by Mr. M'ENTER. Q. I believe you say you went only once with the prisoner to the theatre? A. Twice—the second time I went I saw the "Corsican Brothers"—he was much delighted at the part where one brother shot another man—I forget what it was; I forget the piece now—he said he would like to appear to me when he died, the same as the ghost does in the "Corsican Brothers" (there was not a bloodstained figure on the stage in the course of the performance)—I said to him, I think it is very ridiculous; I should not like you to appear to me when you are dead—he has frequently said he should shoot himself—I endeavoured to reason him out of those notions—I spoke of his soul, and told him he was acting very wickedly, that he talked wickedly—he said he wished he was dead; he always imagined that he was going to die—he appeared at times very well in health, and at times he was not well—he frequently said that since he had known me he had forgotten his child—he said he thought the medical man at Penshurst had injured him—he did not describe to me how the injury arose—he always spoke of it in a tone of complaint—I used to tell him it was nonsense, that he imagined these kind of things—he said he did not imagine them—I believed that he did imagine things.

COURT. Q. Did he frequently speak about the doctor at Penshurst, and imagine he had done him harm? A. Not very frequently, but sometimes.

MR. M'ENTER. Q. You endeavoured to reason him out of these imaginings? A. Yes—I used to say I thought he was very silly, the doctor would not injure him, it was not likely; that he used to read so many operas till he fancied he was one of the beings in the opera—he used to repeat them all, sing them all, parts of all the operas—I meant he fancied he was the being that was performed, not the actor, but the individual represented.

COURT. Q. Can you name any opera in which he said he fancied he was the being of the opera? A. No, I cannot state any opera; but he used to state that they were very beautiful, and he admired them so much.

MR. M'ENTER. Q. What was your opinion from hearing him talk in this way? A. It never occurred to me that he was mad, but I thought it was very strange; he was a man of such great imagination, but I did not think he was mad—I do not remember ever saying to any person that I thought him mad—I cannot tax my memory with it—I do not think I ever said so—I might, perhaps, have said in a joke that I thought he was going out of his mind, but I did not think it; I do not remember ever saying so.

Q. In the two letters that he sent to you, were there any kind expressions in regard to Mr. and Mrs. Lambert? A. I think in one he said, "Give my respects to Mr. and Madame Lambert"—I have occasionally written letters for him at his request—(*looking at some letters*) these are my writing—I wrote them at the request of the prisoner—I have not looked them through; I hope there is nothing put in them that I did not write.

MR. BODKIN. Q. When were those letters written? A. I have not the slightest idea; I did not write them by his dictation, he merely expressed what he wanted said, and I wrote it in my own language—one of these letters is dated December, but I think I must have written it before December—I think it was about December—it is dated from Newman-street—they were both written in Newman-street; but I should imagine this one was the first, and that one the last I ever wrote for him—Mr. Lambert used generally to write his letters for him; he was out when I wrote these—I think they were both written in Newman-street, I could not swear so—he did not tell me that he had undergone a very painful surgical operation in the country—he told me he had undergone an operation, but he did not tell me the doctor that operated upon him; he did not tell me who operated upon him—I understood from him that he thought he was injured in that operation; he

thought he was suffering from fistula—I understood from him that the operation was for fistula—he complained of pain in his left side—he always appeared changed when it was wet weather—he said he still suffered some inconvenience or pain from the fistula—I went with him to see the “Corsican Brothers;” there is a representation there of one man shooting another; he does it to protect some woman whom he is in love with; it is Charles Kean who plays the character—the man whom he shoots, is the man who is represented to have killed his brother; the death is caused by stabbing, not shooting; I am so confused I did not recollect—the ghost of the one brother appears to the other simultaneously—the prisoner then said that after his death he should like his ghost to come and visit me—that was the observation he made, in a jocular tone—that was after we had been intimate; it was when we were in Foley-place that I went to see the “Corsican Brothers”—he always spoke to me in terms of strong attachment—he did not talk about shooting himself before we got to Foley-place, it was when he was at Foley-place—he was jealous of me—he was not jealous of anybody in the house, or of anybody who came; he was not jealous of any particular person, but generally jealous—I do not think any foreigners came to see him in Foley-place—sometimes a friend came to Newman-street—I do not remember any Poles coming, they were Italians and Hungarians—he did not talk very often of shooting himself, he said it once or twice—that was not when he was a little jealous—I never heard him say that he would shoot himself from any jealousy—he appeared jealous at times, by his talk, not by his manner—he expressed an apprehension that I might like somebody else as well as him—none of the visitors I have spoken of went to the theatre with me at any time, neither with him, nor without him—I know he had a daughter who was down in Kent, where he had formerly lived—after he became acquainted with me he was very attentive to me—I never saw his daughter—I could not hear the conversation which took place between the prisoner and Mr. Lambert—they did not talk particularly loud.

The remaining witnesses for the prosecution were Edward Dugan, another policeman, and John Vincent, the pawnbroker from whom the prisoner bought the pistols, and who confirmed the account previously given of that transaction in the prisoner’s own statement.

The medical witnesses called on this side were Mr. M’Murdo, Dr. Mayo, and Dr. Sutherland, who deposed as follows:—

GILBERT MCMURDO, ESQ., *sworn, and examined by MR. BODKIN.* Q. Are you the surgeon of Newgate? A. Yes.

Q. Has the prisoner been under your notice during his confinement in the prison? A. He has.

Q. From what time? A. From the day of his admission.

Q. When was that? A. I do not at this moment recollect the date. I saw him on the day he was brought in.

Q. It was about six weeks ago, I believe? A. About that time.

Q. Did you find him suffering under any bodily ailment? A. I found him suffering chiefly in consequence of the wound which he was said to have inflicted on himself.

Q. But I mean independent of that? A. He complained after a few days of a bleeding, which I attributed to the existence of piles, and which he allowed existed.

Q. Did you examine him? A. I did.

Q. Did you find the presence of piles? A. I found a small pile, which I considered indicative of the existence of internal piles, from which the blood proceeded.

Q. Did you examine that part of his body so as to ascertain whether there were internal piles? A. There was a small external one, which is indicative of internal piles; generally speaking, when external piles are found, and bleeding has occurred, we presume, without putting the patient to further pain, that internal piles exist.

Q. Did you see any appearance of an operation having been performed on that part of the body? A. I did.

Q. For fistula? A. Yes.

Q. Was it perfectly healed? A. Not entirely; there was a little watery discharge from a little orifice in the skin where it was abraded.

Q. That was the case when he came in? A. Yes, or within a few days afterwards; he did not tell me of it till then.

Q. It was the case when your attention was called to it? A. Yes.

Q. There was a little watery discharge, you say? A. Yes, which is common under such circumstances, occasionally a very small quantity.

Q. Did he make any representation to you with respect to any discharge from that wound? A. Not in the manner which I have heard.

Q. What did he say? A. He said that he passed blood.

Q. From there? A. "From behind," he said; he did not represent to me anything about water.

Q. He did not represent to you any gushing of water? A. No, he did not.

Q. Not all the time he has been under your care? A. Yes, because I asked him.

Q. He represented that he passed blood? A. Yes, when he went to stool.

Q. You found that to be true? A. I did not see it; I found that he most likely had passed blood.

Q. As I understand you, until you spoke to him upon the subject, he did not complain to you of the passing of water? A. Not at all.

Q. You had heard of that, had you? A. I had heard of it.

Q. When did you speak to him about it, and how long had he been in the gaol before you heard of it and mentioned it? A. I did not speak to him about it until this morning; nor did I hear of it to draw my attention particularly to it until yesterday.

Q. You saw him early this morning? A. I came down to the prison for the purpose of asking that question.

Q. What question did you ask him? A. "Did you say anything to me about water having passed from behind?" He then said, "My fistula," or "fistule," as he calls it, of course.

Q. Was that all he said in answer? A. That was all he said in answer at that moment. I said to him, "But did you ever think that you made water from behind?" and he answered, "I do not know that I ever did."

Q. Was that all that passed this morning? A. To the best of my recollection it was.

Q. During his stay in the gaol you have had conversations with him repeatedly, I think? A. Almost daily.

Q. Have you ever observed, in the course of your attendance upon him, or in the conversations you have had with him, any symptoms of aberration of mind? A. I have not.

Cross-examined by MR. M'ENTEE. Q. I believe, with regard to fistula, there is an indication of a return after an operation? A. Yes, the same state of body that produced it before, under similar circumstances will produce it again.

Q. Have you ever paid any attention to the treatment of lunatics? A. I have had a great many persons about whose state of mind inquiry has been made, or was made under my care, during my tenure of office for a considerable time; I have been surgeon for twenty-five years to the gaol of Newgate, and I have had a great many persons under my care, some who have been of unsound mind, and some who have been thought to be so.

Q. What would you prescribe for active irritation of the brain? A. I do not profess to be what Dr. Conolly is—set apart to that part of the profession.

Q. Would you consider that large local bleeding, where a man is labouring under inflammation of the brain, in any degree would have a beneficial effect—I mean local bleeding near the seat of disease? A. Will you repeat your question?

Q. Supposing a man labouring under inflammatory action of the brain, would local bleeding have a beneficial effect? A. If a person was maniacal we might not be disposed to pursue that plan of treatment; I should give him a sedative.

Q. Would not bleeding have a sedative effect? A. It would have a depressing effect; but every case must be spoken of *per se*.

Q. Have you ever heard of cases of inflammation or irritation of the brain in which local bleeding has been made use of? *A.* I have heard of persons being bled from the arm for such cases.

Q. Have you ever heard of cupping in the neighbourhood of the brain? *A.* Of course I have, often when persons have been suffering from plethora.

Q. That would cause a disease of the brain, would it not?—it would cause congestion of the brain? *A.* That is not disease.

By MR. JUSTICE ERLE. *Q.* Plethora may cause a disorder of the brain? *A.* Certainly.

By MR. M'ENTER. *Q.* If a man was suffering under an appearance of excitement or insanity, would bleeding have a beneficial effect? *A.* There might be a great many cases.

Q. Would it have a beneficial effect? *A.* Not necessarily; it might in some.

Q. Would quietness and a regular diet have an improving effect upon that state of mind?—would quiet and a regular diet and bleeding restore his mind? *A.* It is natural that quietness and regularity should improve the condition of a person thus situated.

By MR. JUSTICE ERLE. *Q.* And would restore an unsound mind to a sane state? *A.* I did not say so.

Q. That was the purport of the question? *A.* I said nothing of the kind.

Q. If a man was labouring under excitement or insanity, bleeding and regular diet and quiet might relieve him? *A.* It is very rarely that bleeding is had recourse to.

By MR. M'ENTER. *Q.* Do you believe that a regular system in prison under such circumstances as the prisoner was under here would have a sedative or an improving effect upon his mind? *A.* I think anybody committed in an excited state of mind would probably be in a more quiet state of mind after being in prison some time, and kept quiet and regular. If a person when committed was simply in an excited state of mind from the circumstance of his being committed, I believe his mind would become more tranquil, calm, and composed after being there some time,—that is supposing it is merely the excitement incidental to his committal.

Q. From seeing the present state of mind, you would not attempt to speak of any previous state? *A.* I can only speak of that which I have known.

Re-examined by MR. BODKIN. *Q.* On the first day he came in, and before any beneficial effect could have resulted from the diet and treatment of the gaol, did you observe any symptom whatever of aberration of mind? *A.* I did not.

Q. Of course with respect to bleeding, like any other mode of treatment, it will depend upon the symptoms of the case? *A.* Every case must be treated by itself.

Q. In the case of a person long depressed and debilitated, can you conceive that bleeding would have any beneficial effect? *A.* On the contrary.

Q. It would add to the depression? *A.* If previously depressed, certainly.

By MR. JUSTICE ERLE. If he was labouring under depression, would that be increased or diminished by committal? *A.* If he was labouring under depression, that depression might be increased by the fact of committal.

By MR. M'ENTER. *Q.* Then excitement would be decreased by the same means? *A.* The question, as I understand it, is, that if the person's depression is likely to be increased by committal, would on the contrary his committal in a maniacal condition have decreased it.

MR. JUSTICE ERLE. No, my question was entirely confined to committal—if he laboured under depression at the time he was committed to prison, it was supposed that confinement to prison would restore him to equable spirits; your (Mr. M'Enter's) question was of some supposed result of bleeding.

Q. In excitement of the brain would bleeding be a universal remedy? *A.* Not at all in some cases, it might in a great many cases—in the majority of cases I should expect that it would not be had recourse to.

Q. It is sometimes had recourse to? *A.* Many persons may.

By MR. BODKIN. Has any medical man on the part of the prisoner seen him in the gaol since he has been there? *A.* Not that I am aware of.

Q. Two physicians sent by the Government have seen him? *A.* Dr. Sutherland saw him separately from myself—Dr. Mayo also saw him separately from myself.

Q. Dr. Conolly has not had the opportunity of personal examination? *A.* No, he has not—I should have been most happy to have accompanied Dr. Conolly.

THOMAS MAYO, Esq., M.D., *sworn, and examined by* MR. BODKIN. *Q.* You are a physician, and I believe have paid great attention to what are called diseases of the mind? *A.* I have.

Q. How long have you been devoting yourself to that branch of study? *A.* I have never devoted myself exclusively to it; but I have paid great attention to it.

Q. How long have you been practising? *A.* Since the year 1818: I studied in France for some time, and had the management of an establishment there; which would probably turn my attention to it; but I have never been exclusively a physician of that class.

Q. Not exclusively confined to the subject of insanity? *A.* No; about ten years ago Dr. Southey and I were appointed to investigate Bedlam, in relation to some charges made against it by Mr. Serjeant Adams.

Q. Have you recently delivered a course of lectures before the Royal College of Physicians upon the subject of insanity? *A.* More particularly upon the subject of medical evidence and proof in cases of insanity.

Q. Were you desired by the Government to visit the prisoner in Newgate? *A.* I was.

Q. And have you seen him there? *A.* I saw him there yesterday, and had a long conversation with him.

Q. You had that conversation with him with a view to form a judgment upon the state of his mind? *A.* Precisely.

Q. Were you able to detect any symptoms of aberration whatever? *A.* No, in that conversation I saw no symptoms of aberration whatever.

Q. Have you been desired also, by the same authorities, to attend the trial here to-day? *A.* I have.

Q. Have you listened to the evidence? *A.* Carefully.

Q. Have you heard what has been stated with respect to the prisoner's representation or impression that water came from the wound where he had had a fistula and an operation performed? *A.* Yes, I have heard that.

Q. Do you consider that, from all the evidence you have heard respecting it, an insane delusion of the mind? *A.* I conceive that that impression in the patient was founded upon the slight dribbling of serous fluid from the cellular tissue about the wound, which there must have been, even in that small place, exaggerated by his mind, that mind being intensely sensitive and excitable. I could observe that in the conversation I had yesterday.

Q. Is there a state of the body or nerves that you call hypochondriasis? *A.* There is.

Q. Do you judge, from what you have heard with respect to the history of this prisoner, that he has ever been the subject of an attack of that kind? *A.* I think, considering the nature of the delusion—which was not in my eye strictly an insane delusion—considering his extreme excitability, and the sensitive state of his mind, I should conceive that all his peculiarities might be accounted for, without supposing anything more than hypochondriasis.

By MR. JUSTICE ERLE. *Q.* Considering the extremely excitable state of his nerves, you think all the symptoms that have been spoken of would be accounted for by hypochondriasis? *A.* All the symptoms that look like insanity might be accounted for by that; hypochondriasis being a form set apart for those who are very nervous about their own health—a peculiar set of persons—whom it would be very unjust to call insane; persons who are peculiarly anxious and nervous upon the subject of their health.

By MR. BODKIN. *Q.* And frequently imagining diseases which do not exist? *A.* Frequently imagining diseases.

Q. Have you, in the course of your practice, known cases in which persons labouring under hypochondriasis have imagined diseases to exist in respect to their own person, which had no foundation whatever in fact? *A.* It is more frequently the case that they exaggerate a symptom. I am assuming in this case, not a complete imagination, but an exaggeration.

Q. That is your opinion in this case? A. Yes, it is more frequently that they exaggerate a symptom; and I imagine that to be the case in this instance.

Q. Have you known cases where a strong belief existed of a particular disorder and ailment without any foundation whatever? A. They may be generally traced to some trifling foundation.

Q. Do you consider that persons exaggerating in that way could be at all properly classed with those of unsound mind? A. Certainly not; you would extend a very dangerous excuse if you did.

Cross-examined by MR. M'ENTER. Q. You only saw the prisoner one day, I believe? A. Only one.

Q. You have heard all the evidence here to-day? A. Yes, I have.

Q. With regard to the delusion which you consider not to be a delusion—about the partial passing of water; would you consider, if a man thought that his bed was swamped with water, that that would be a delusion? A. Certainly not. I should use precisely the same method of explaining that as the other form I spoke of. If a patient held language to the effect that his bed was swamped, if it began from the slight ground which this person seems to have had, I conceive it quite natural, quite conformable with the laws of hypochondriasis, that he should go on exaggerating to any extent.

Q. After he arrived at any extent, would you consider it had ever arrived at a delusion? A. Well, that is the fallacy of division; there is no end.

Q. Then you would consider that a man who said his bed was swamped, although it was repeatedly shown him that there was not a drop of water of any kind in his bed, and that delusion being still persevered in, day after day, was not under delusion? A. It would be a very strong case, I admit; there is no question about it.

Q. With regard to incoherency, do you consider that an element of delusion—I mean, an element in making up delusion? A. No, I do not.

Q. Do you consider that inconsecutiveness is? A. They are so nearly the same thing.

Q. Would you consider those two—inconsecutiveness and incoherency—as tending to create a morbid delusion? A. No; there must be something beyond that.

Q. I will just read you a passage from the work of a gentleman whom I am sure you must have a very good opinion of: "In dealing with the two grounds which I have recently considered for imputing insane delirium—namely, the presence of inconsecutiveness of thought, in cases of certain delusions—how does the medical witness conduct his inquiry and arrange his evidence? He makes, or he ought to make, each of these elements throw light one upon the other. Where incoherency and inconsecutiveness exist there is little difficulty. Continual inconsecutiveness I believe involves the presence of morbid delusions—that is, sure to produce them."

MR. JUSTICE ERLE. What are you reading from?

MR. M'ENTER. I am reading Dr. Mayo's own words, from page 26 of his work.

Q. Do you agree with that? A. Yes, inconsecutiveness when continued, and incoherency, are pretty sure to have delusion with them.

Q. "And is therefore a most important element in the proof of insane delirium?" A. Certainly.

Q. Did you observe in the evidence given here, proof of inconsecutiveness of character in the conduct of this man? A. No.

Q. Did you pay attention to the evidence of Mr. Henry upon that subject?

MR. JUSTICE ERLE. What particular part of his evidence?

MR. M'ENTER. That he could not get him to connect two ideas.

A. It may perhaps be an answer to your question, as far as I can give one, to say this, that I saw not that amount of disorder of thought, or any such extent of error in the succession of ideas, which would amount, in any fair reasoning, or observation, to insanity. That takes in inconsecutiveness and incoherence too.

Q. Do you consider the existence of positive delusion to be an evidence of unsound mind? have you ever known a sane delusion? I will read you Lord Brougham's definition: Lord Brougham defines a delusion to be "a belief in things as realities which exist only in the imagination of the patient." Do you consider

that definition to be a correct one? *A.* Certainly not, it is much too loose, obviously so; I am sure Lord Brougham himself would declare so.

Q. What is your definition of a delusion? *A.* The basis of a delusion is a false perception—I believe I may say that every delusion is a false perception—that false perception may either be one of the special senses, or it may be one, corresponding with the delusion of the special senses, of the understanding.

Q. Would a delusion combining both those, be a perfect delusion? *A.* It would.

Q. A delusion of the understanding and the senses both? *A.* Yes.

Q. If a man fancied that he passed water in enormous quantities and that his bed was swamped, and if it was proved that he did not do it, and he was shown that the sheets were not wet, would not the two specifics for your delusion exist? *A.* I have already explained, that there is a form set apart called hypochondriasis, which begins with certain grounds—now the false perception, which is a real delusion, has no grounds—but the hypochondriac starts upon perhaps most trivial grounds, and the mole-hill grows into a mountain, and the expression of swamping perhaps takes place: that is a totally distinct thing from what I mean by a delusion.

Q. Does not hypochondriasis merge occasionally into insanity? *A.* Of course there is an immense difficulty in drawing lines, but that would become a matter of fact: there must unquestionably be, in every science which is not a perfect one, a good deal of philosophical empiricism.

Q. Will you listen to this definition of Dr. Winslow's, and tell me your opinion of it? "A delusion is a belief in the existence of something extravagant, which has in reality no existence except in the *diseased* imagination of the party, and the absurdity of which he cannot perceive, and out of which he cannot be reasoned."

MR. JUSTICE ERLE. That definition cannot be of the slightest use, because the premises do not exist.

Q. Do you think that a man, whose judgment would not allow him to correct a transparent delusion, could exercise a sound judgment in other matters? *A.* I do not suspect that the person in the dock is one who has exercised a sound judgment in any matter lately, but I allude to wisdom and experience.

Q. Do you think that a man whose judgment would not allow him to correct a transparent delusion, could exercise a sound judgment in other matters? *A.* It is often the case.

Q. What is your opinion? *A.* I can only say that in such modes of delusion as belong to hypochondriasis there are many men whose judgment is excellent but who are exceedingly erroneous in other matters.

Q. By MR. JUSTICE ERLE. They are unable to correct the delusions they have in respect to their own health? *A.* Yes.

Q. By MR. M'ENTEE. If you find the elements of delusion combined with a suicidal act, would not you consider that strong evidence of insanity?

MR. JUSTICE ERLE. A delusion in respect of water?

MR. M'ENTEE. Yes, a delusion in respect of water, combined with a tendency to suicide, carried out in practice, would that be evidence of insanity?

A. If I knew hypochondriasis to be the cause, the delusion and the suicidal attempt in a person of such sensitiveness and such unfitness to deal with the difficulties of the world would not; such a person is liable, sane or insane, when things go wrong to commit that act: there are some three or four points which I mention as convertible, in my book, in order that the whole book may not be looked upon with a jaundiced eye.

Q. Will not a delusion occasionally disappear after an attempt at suicide or an accidental bleeding? *A.* If a real insane delusion occurred and the patient was of a plethoric character, and not of that sort of constitution in which bleeding disagrees with the insane, no doubt the loss of blood might temporarily benefit him.

Re-examined by MR. BODKIN. *Q.* With respect to the effect of bleeding in a plethoric subject: when the vessels of the brain are in a state of congestion bleeding would be useful? *A.* Moderate bleeding; but in insanity it is not right to take as much blood as the state of the pulse would indicate.

By MR. JUSTICE ERLE. *Q.* If the brain is congested in insane persons bleeding may be beneficial? *A.* Yes, moderate bleeding.

By MR. BODKIN. Q. Having heard the history of the person and his great depression and debility, are you of opinion that bleeding would be proper? A. He has the constitution not of our climate, he has the Italian pulse, but a very small one, and a nervous constitution, and I should very much doubt whether bleeding would suit him under any circumstances, at least they must be very extraordinary circumstances—I carefully felt his pulse.

ALEXANDER JOHN SUTHERLAND, Esq., M.D., *sworn, and examined by MR. BODKIN as follows*:—After a few preliminary interrogations, the witness was asked, When he saw the prisoner? A. Yesterday.

Q. Did you have a conversation with him? A. I had.

Q. Was it at the same time that Dr. Mayo saw him? A. No, before.

Q. Was that the only time? A. Yes.

Q. How long were you with him? A. An hour and a half.

Q. Conversing on different subjects? A. Yes.

Q. Did you observe any symptom of aberration of mind? A. I did not.

Q. Have you heard the evidence in this case? A. I have.

Q. Have you heard the acts and observations attributed to the prisoner as indicative of the state of his mind by the witnesses at different times? A. I have.

Q. Assuming those to be true, would you in your judgment refer them to unsoundness of mind? A. No; I cannot consider the acts to have been the result of motiveless impulse.

Q. You mean the acts of violence? A. Yes.

Q. But you have heard the history of the prisoner, and of his asking a man to shoot him? A. Yes.

Q. Assuming those circumstances to be true, would you refer them to unsoundness of mind? A. No.

Q. With respect to this particular one, his impression that water came from his person in quantities in the bed, and that on one occasion he said that he swamped the bed, what should you consider that the effect of? A. I should consider that an illusion, the result of hypochondriasis, and not a delusion the result of insanity?

Q. Have you in your experience met with many cases where persons suffering under hypochondriasis take false views of the ailments of their own bodies? A. It is very common.

Q. Do you find them frequently persist obstinately in those impressions? A. Yes.

Q. Do you ever consider it necessary to order such persons under restraint, or to treat them as insane persons? A. No.

Cross-examined by MR. LE BRETON. Q. May I ask you if the belief that the prisoner's bed was swamped with water, although it was not the case, was not a delusion? A. No, an illusion, the effect of hypochondriasis.

Q. Where is the seat of hypochondriasis? A. In the nervous system.

Q. Is it not in the mind? A. It is seated generally in the nervous system; it is the effect of the nerves conveying false notices generally through the stomach to the brain.

Q. May not hypochondriasis proceed to mental disease? A. Yes.

Q. If you find in combination with hypochondriasis suicidal notions and tendencies, and general depression and melancholy, would you not consider that evidence of a mind not sound? A. No; not taken in the way you put it, without considering the whole circumstances of the case.

Q. Would it go a long way to constitute mental unsoundness? A. It would go some way.

Q. What would it require? A. Delusion.

Q. Is not the bed being swamped with water a delusion? A. An illusion.

Q. What is the difference? A. An illusion is objective.

Q. Is a delusion subjective? A. It may be, but the judgment must be involved.

Q. On what does the illusion act? A. On the brain.

Q. Where a man was argued with, and shown to demonstration that no such illusion existed, would not the judgment come into play and be called upon to decide? A. Yes.

Q. If after that the illusion was persisted in, would you not conceive the judgment to be in fault? *A.* Yes.

Q. If the judgment be at fault, is there not something wrong in the mind? *A.* No.

Q. Not on a transparent fact like that? *A.* Not without hypochondriasis.

By MR. JUSTICE ERLE. *Q.* Not in the sense of unsound mind? *A.* No.

By MR. LE BRETON. *Q.* Would you consider the mind to be a sound mind that would come to such a judgment? *A.* It might be.

Q. It might be perfectly sound? *A.* Yes.

Q. If a man believes that his legs are made of glass, and it is shown that they are not, would that man have a sound mind? *A.* No.

Q. What is the difference between the bed swamped with water and the glass legs? *A.* The one is so palpably absurd upon the face of it, that it is a delusion.

Q. Is not it palpably absurd that the bed was swamped with water, when it was shown to be untrue? *A.* No; I should inquire if there were any reasonable grounds for the supposition.

Q. But where it is demonstrated that there is no water in the bed? *A.* Yes.

By MR. JUSTICE ERLE. *Q.* When there is no reasonable ground for the supposition? *A.* Then I call it a delusion.

By MR. LE BRETON. *Q.* Then in this case the prisoner was under a delusion? *A.* I do not say so; if I found that there was reasonable ground, I should not consider it a delusion.

Q. What could be the reasonable ground? *A.* He told me that Mr. Henry had tried to persuade him that he did not pass the water behind, and he said that he showed Mr. Henry the lint, and it was wet.

Q. Do you consider the exuding of a small portion of moisture would be sufficient ground for the illusion if the bed was dry? *A.* I should consider that it was a great exaggeration of the fact.

Q. Is there a progress in mental disease which is called the incubation? *A.* Yes.

Q. Is hypochondriasis a cause of mental disease? *A.* Yes, a very frequent cause.

Q. Although a man may be hypochondriacal without being insane, is not hypochondriasis one of the conditions of insanity? *A.* It may be, but there is something superadded.

Q. If great mental depression were superadded to hypochondriasis, would not it be an evidence of unsoundness of mind? *A.* Not a symptom: it would be a symptom leading out of it.

Q. Is a suicidal tendency one of the symptoms of mania. *A.* Very frequently.

Q. Are there not cases in your experience, mentioned in books, where a man after brooding over some fancied wrong, and the commission of a crime, has suddenly recovered his mental faculties? *A.* Yes.

Q. By MR. JUSTICE ERLE. Insane, or whatever the word is for it—an insane person? *A.* Yes.

Q. By MR. LE BRETON. I would ask you whether the quiet and isolation in which the prisoner has been lately, may not have had a beneficial tendency on mental disease, assuming it to have existed? *THE WITNESS.* You put that hypothetically.

Q. Yes? *A.* Yes.

Q. Does it follow because you found him without mental disease yesterday that he may not have been maniacal on the 7th of January? *A.* No, it does not follow at all.

Q. May it not be so? *A.* Yes.

Q. Taking all the circumstances of this case into your consideration, can you form a positive opinion that the prisoner was of sane mind last January? *A.* I do not like to give an opinion about that; I think that is for the Jury to give an opinion of, not for me.

Q. By MR. BODKIN. You did not see him in January? *A.* No.

Q. Did you see in this case clear proof of his having been suffering from hypochondriasis? *A.* Yes.

Q. I do not know whether you have said it, but the tendency of hypochondriacal patients is to exaggerate any ailment of the body, is it not? *A.* Yes, it is.

Q. That is a marked feature of the ailment? A. Yes, it is.

Q. Then this impression of the prisoner about the bed, had reference to a supposed exudation from his body, which he exaggerated? A. Yes.

Q. Is that a circumstance that you would consider at all unusual in a person suffering from hypochondriasis? A. No.

Q. On the contrary, is it not one of the most usual features of that complaint? A. It is.

Q. Having heard the evidence respecting this prisoner, would you refer any act of his of which evidence has been given to-day, to the influence of an unsound mind? A. I think I answered that before in saying, that the act which I have heard of I do not consider to be motiveless, and therefore the result of insanity.

Q. That is assuming that the facts are true, that he was dismissed from the house, and so on, in the way that has been proved? A. Yes.

For the defence there were called:—

John Crawford, Esq., the prisoner's former master, who not knowing that the defence of insanity was to be set up, had voluntarily called at the prison, before the trial, in consequence of the strong impression left on the minds of some members of his family, that Buranelli's intellect was disordered when he lived with them, five years before the murder.

The next witnesses were Elizabeth Davis, a fellow-servant of the prisoner at Mr. Crawford's; William Eagleton, the master tailor at Penshurst, for whom Buranelli had worked during the three years he resided at that place, previous to the death of his wife in childbed; James Cook, a shoemaker at Penshurst, with whom the prisoner had lodged; John Simmonds a gardener, at Penshurst, Buranelli's brother-in-law, and Harriet Simmonds, his wife. The evidence of these different persons established:—

1st. That Buranelli had originally gone to Penshurst on account of his marriage with Martha Ingram, his fellow-servant at Mr. Joyce's, and that he had followed the occupation of a tailor, working for the same master, and living in the same lodgings, during the whole time, a space of about three years. His fellow-workmen and companions stated that he was cheerful, industrious, sober, and much liked by every one.

2ndly. That, consequent on his domestic misfortunes, his disposition had altered; he had become dejected, irritable, violent, and morose; frequently spoke of destroying himself; and they believed would have done so, had it not been for his child, to whom he was much attached. They further affirmed that he had endeavoured to procure laudanum, had tried to persuade a man to shoot him, and on one occasion had run away with so strongly expressed a determination to drown himself, that his companion would not leave him until he had placed him in the hands of a brother-in-law. He had for some time entertained feelings of extreme animosity against Dr. Buller; concealed the medicines given to him, and refused to take them, alleging that Dr. Buller wanted to poison him; a suspicion which he supported by an absurd test with a half-penny.

The following witnesses deposed to the condition of the prisoner after he left Penshurst, in August, 1854, for the purpose of seeking admission into the Middlesex Hospital, when he first became acquainted

with Mrs. Williamson. Their evidence is so important that it is here given in full, as it was sent to the Secretary of State after the trial. Substantially they made the same statements in court.

DECLARATION OF MARY ANN FLOWER.

I, Mary Ann Flower, head nurse of Forbes' Ward, Middlesex Hospital, aged 40 years and upwards, do solemnly and sincerely declare : That I have known Luigi Buranelli (now a prisoner in Newgate, under sentence of death,) ever since the 17th day of August, 1854, on which day I recollect being in the ward when a short man (apparently a foreigner) brought the prisoner to me, and said he had seen Mr. Shaw (the senior surgeon of the hospital), and he had requested that the prisoner should be admitted. The short man (who apparently was a friend of the prisoner) said he was very nervous and excited in consequence of his sufferings from fistula ; the prisoner said nothing, but seemed very low and desponding. His friend left, and I pointed out to the prisoner his bed in the ward. That same day the same man came again, with a female, who at the trial of the prisoner I recognised to be Mrs. Lambert—they brought the prisoner tea, sugar, &c.—She said she did not know what to do about leaving him, for she did not think he was fit to be left alone. The prisoner was crying ; I asked him what he was fretting about ? but he did not seem to know clearly what was the matter. He said the doctor in the country had killed him—that his wife's friends in the country had done him out of a great deal of property. I said to the female, "Well, he will not be left alone here ; there is always some one in the place." She then seemed satisfied, and went away with the foreigner. I noticed the next day that the prisoner was low and desponding and very strange in his manner, so much so, that I made the remark to my assistant nurse, Elizabeth Naylor, that I did not think the prisoner could be in his right mind. Afterwards, viz., on that same afternoon, about twenty minutes past three, on my coming up from the dispensary, my nurse Naylor said she had been looking for me, as that lady and gentleman had come again, and she had asked them into my room. I went in and saw the same foreigner and the same female. She asked me what I thought of the prisoner ? I said I thought he was very strange, and I asked her if she thought the prisoner was quite right in his mind ? to which she replied, "These foreigners are strange ; that little fellow (pointing to the man) is more like one of us."—She said that the loss of the prisoner's wife had preyed upon his mind, and that he had been defrauded out of a great deal of property in Italy. From that time to the 2nd of September the prisoner remained in the hospital, until he was discharged to make room for cholera patients—the female visiting him, and also a tall gentleman in a cloak, in the interim. During the whole of that time the prisoner was low and desponding, but particularly mild in his manners. He was labouring under a delusion that water was passing through the wound—he said frequently that the water was coming through into the bed ; there was not the least foundation for it. He was exceedingly grateful for all that was done for him—his manner was so strange that I should not have been at all surprised if I had heard he had destroyed himself. And I further solemnly and sincerely declare : That I recollect Mr. Henry, Assistant Surgeon of the hospital, coming to me about three or four weeks ago, but the exact date I do not recollect, when he asked me whether I remembered the prisoner Buranelli being a patient of mine ? when I narrated to him as nearly as possible what I have above stated, which was just the same that I had told to Mr. Vigers (the house surgeon) just after the murder took place ; the reason I told Mr. Vigers of the circumstances was because I remembered the prisoner's name was Buranelli. The prisoner on my going into the ward to attend the patients used often to call to me, and exclaim in broken English, "Me so wet sister, me swimming, do look," and this at last became so annoying that I used to avoid going into the ward when I had not time to spare from the other patients. At the trial of the prisoner, when I was sitting outside waiting to give evidence, Mrs. Williamson came and sat down by me—she entered into conversation with me about the prisoner, but I did not know who she was until she told me her name, although I remembered having seen her once at the hospital ; she asked me whether I was going to give evidence for him, and I said, "Yes I was ;" she then said he could never have been in his right mind, or he would not have talked to her as he used to do ; she said he used

to say to her, "Madam, I should like to take you up to the top of a high rock, and both throw ourselves off"—and she then said that she would answer him, "Thank you, but I should not." I then said to her, "Knowing this, I consider it your duty to state it on the trial;" and she said, "You need not tell me that, you must think how anxious I am to save him."—She said that on the morning of the murder, when he rattled at her door to get into the room, she did not know his voice at all, it was so altered, and she thought it was the sweeps, and that she did not recognise him until he told her his name. I recollect the day after the trial, Mr. Shaw, when visiting his patients in Forbes' Ward, asking me if it was frequently that the prisoner asked me about his bed being wet, and on my saying, "Yes," Mr. Shaw asked me if I thought it was as many as six times, and I then said, "If I were to say sixty times, Sir, I should not exaggerate, for it was a continual thing."

And I make this solemn declaration, conscientiously believing the same to be true: &c. &c. &c.

Declared before the magistrate, at Marlborough-street Police Court, the 18th April, 1855.

DECLARATION OF ELIZABETH NAYLOR.

I, Elizabeth Naylor, assistant nurse of Forbes' and Handel Ward, Middlesex Hospital, aged 51 years and upwards, do solemnly and sincerely declare: That I have known Luigi Buranelli (now a prisoner in Newgate under sentence of death) ever since the 17th day of August, 1844, on which day I recollect being in the ward when the prisoner was brought in by a short man, apparently his friend. The prisoner was low spirited—his friend left him, and I got him to bed. In two or three hours afterwards the same man and a female (with dark eyes, stout, and well-dressed, who I subsequently recognised at the prisoner's trial to be Mrs. Lambert) came into the ward, went to the bed and stood by the prisoner. She put in his locker tea, sugar, &c.; said he was a very excited and nervous young man, and she did not think he could be left in the hospital. On the Friday she came again with the same man, and said she did not think he could be left: I told her she had better see Sister Flower, and I took her into the Sister's room, and there left her. She used to come frequently with a tall man in a cloak. The prisoner did not act like a man in his senses, he seemed always bewildered and unconscious of anything—I used often to say to him, "Louis, what ails you?" he used to say, "My head is so bad, nurse." He used to fancy that water passed through his wound: there was never such a thing seen on the sheets; if there had, I should have seen it: many a time I have seen him shed tears against the window: he used to lay and cry, and was generally very depressed from the time of his coming in until he left the hospital, which he did to make room for cholera patients. Had I heard that the prisoner had destroyed himself, I should not have been at all surprised.

And I make this solemn declaration, conscientiously believing the same to be true, &c., &c.

Declared before the magistrate, at Marlborough-street, the 18th April, 1855.

DECLARATION OF GIOVANNI CHIALES.

I, Giovanni Chiales, of the Café de la Stella, Great Windmill-street, Haymarket, in the county of Middlesex, hotel and restaurant keeper, do solemnly and sincerely declare That I know and am well acquainted with Luigi Buranelli (now a prisoner in her Majesty's gaol of Newgate, under sentence of death): that I have known him for a period of about five years, from his having at intervals come to my restaurant during that space of time: that he always seemed to me a man of weak, feeble mind, and very changing in his disposition: that I noticed this more especially and in a very marked degree recently: that he came to my house occasionally shortly before the murder, and that on the Friday afternoon before the murder he was with me for some time: that he said he was very ill in his head, and was suffering from his fistula, that he had been ruined by the doctors, and that he wanted to go to France: that having a sympathy for him, and thinking that he was decidedly of an insane turn, and believing that a change of climate would do him good, I offered him money to assist him in going to France: that he refused my offer of money, and that he used to talk in such a rambling way, and was so changing in

his wishes and intentions, that I said to him, "Well, Buranelli, if you come like this, you had better not come to my house at all, for you are mad :—" That for some time previous to the affair in Foley-place, I had thought, and had often said that Buranelli was not right in his head. And I make this solemn declaration conscientiously believing the same to be true.

(Signed) GIOVANNI CHIALES.

Declared at the Police Court, Marlborough-street, this twenty-third day of April, 1855, before me :

(Signed) P. BINGHAM.

A Magistrate for the Metropolitan Police District.

DECLARATION OF ELIZABETH GURNEY.

I, Elizabeth Gurney, of No. 63, Newman-street, Oxford-street, in the county of Middlesex, widow, do solemnly and sincerely declare that I am 59 years of age and upwards ; that I have known Luigi Buranelli (now a prisoner in Newgate under sentence of death) from the 26th or 28th day of December, 1854, and about that time he took lodgings at my house. That on Thursday, the 4th of January last, the prisoner, by his loud talking and violent conduct in his bedroom, having alarmed some of my other lodgers, I went up to his room and found the prisoner by himself lying on the outside of his bed, talking loudly, and the window opposite him wide open, although the evening was intensely cold : I asked him then whether he was cold, he said, "No, very warm," and laughed as if he were very much pleased. He then left the room, but returned again directly : I turned round to take away his tea-things, and he said, "What for you take that?" I told him I wanted it for my own use, upon which he took the teapot very abruptly and poured himself out a cup of tea, the prisoner during the whole time appearing unconscious of anything that was passing, but kept his eyes fixed upon me. I went into his room again later on the same evening, and he was writing—there were six or eight letters on the table which he had written. Upon my going into his room he pushed the letters on one side, and afterwards put them carefully together, and at last tore them to pieces and put them under the fireplace ; he then looked at me in a most wild manner, and seemed to think I should read his letters. He did not pass any remark, but took up his pen and continued writing the whole night through. On the following morning (Friday), on my going into the prisoner's room, I found him lying, dressed, upon his bed, with the window wide open (apparently having been open all night), and the room perfectly covered with paper which the prisoner had destroyed. The prisoner, on hearing me enter his room, jumped from off his bed, instantly took up his pen and commenced writing : he then asked me to give him some ink, and on my going to the mantel-shelf for the ink bottle, he started from his chair, looked at me very hard, and slapped me rather forcibly on the shoulder. I asked him what he did that for? The prisoner only laughed, sat down, and resumed his writing for a few minutes ; he then asked me to write an English letter for him, and I told him "I could not, for I could not see." I then mentioned to him that one of my lodgers, who had been with me for five years, would do it for him. He did not answer me, nor did he seem to understand me : he seemed quite unconscious as to what a lodger was ; he only looked at me very hard, and said, "Five year, five year;" and in answer to my questions all the answer I could get from him was "Five year, five year." On the evening of the same day I was sitting in my parlour with my daughters when the prisoner knocked at the room door, and on my opening it, said, "Where is the yard, where is the place" (although prisoner has frequently been in the yard and walked up and down it). I then took a candle and showed him the yard, and on my standing at the door to allow him to pass, he stood still opposite me. I then went into the yard to show him across ; he followed me, and on my standing still at the other side he stood still as well. I then returned into the house and the prisoner followed closely after me. My daughters had been watching the prisoner and me, and we met them in the hall. The prisoner's manner was so extraordinary throughout that we could not help laughing : he joined in the laugh, and went up stairs to his room—he looking over the balusters as he was going. About half an hour after this took place, I heard the prisoner come down stairs, walk across

the yard, and then returned and went to his room again, and this he continued to do until about a quarter to three on the Saturday morning, when he very hurriedly left his room, went down stairs, and out of the street door. I looked out of my window and saw him leaning against the railings, holding his head, in which attitude he stood for about five minutes: he then returned into the house and went to his room.—That during the whole time the prisoner lodged in my house he appeared quite unconscious of anything that was passing, nor did he seem to understand the meaning of any conversation that was addressed to him, nor indeed the meaning of the most common-place remarks; but his conduct was both melancholy and contradictory. Although it was intensely cold, frost and snow being on the ground, the prisoner had a fire only once during his stay with me, and then against his will. He would lie on the outside of his bed with the window wide open, and declare it was very warm; in fact, whenever I mentioned the weather he would insist upon its being very warm. He used frequently to complain about his head, putting his hand on his forehead and exclaiming, “Oh my head, my head.” I also declare that I had no knowledge of the prisoner previous to the 26th or 28th December, and that his conduct whilst in my house, up to the day of the murder, was so extraordinary, that though no one spoke to me about doing so, I considered it my duty voluntarily to go down to this trial and say what I knew. And I make this declaration, &c., &c.

Declared before the Magistrate at Marlborough-street, on the 21st April, 1855.

MEDICAL EVIDENCE IN FAVOUR OF THE PRISONER'S INSANITY.

JOSEPH HOGG BALLER, Esq., Licentiate of the College of Physicians, *sworn, examined by* MR. LE BRETON, *for the prisoner.*

Q. You are a medical practitioner at Penshurst, in Kent, I believe? A. I am.

Q. Do you remember seeing the prisoner at Penshurst? A. Yes.

Q. What did he come to you about? A. I have attended him upon several occasions; the first attendance was about three years ago, when he was suffering from congestion of the liver and piles.

Q. Do you remember his losing his wife at Penshurst? A. I do.

Q. When was that? A. That was early in January, 1854.

Q. What effect had that upon him? A. He became extremely depressed and dejected; and I used to notice him wandering about very much by himself in a very low, desponding state.

Q. Showing symptoms of melancholia? A. Quite so.

By MR. JUSTICE ERLE. Q. Is there any difference between melancholy and melancholia? A. I believe not.

By MR. LE BRETON. Q. Did he work at his employment as before? A. I am not quite sure, but I think he did for a short time after his wife's death.

Q. Then did he apply to you about an abscess that he had? A. He did.

Q. Do you know what time that was? A. That was in April, 1854.

Q. How did he behave then? A. I found him, upon examination, suffering from an abscess at the verge of the anus, which eventually terminated in fistula, for which I operated upon him.

Q. What sort of an operation was that? A. Of a very slight character; it was a fistula of a very trivial nature.

Q. How did he express himself to you about his symptoms? A. He appeared to be very anxious about himself, exaggerating everything; fancying he was going to die, and that it was quite impossible that he should recover from it.

Q. Did you reason with him about being operated upon? A. I did, and had some difficulty in getting him to consent.

Q. He became unusually irritable, did he not? A. After the operation, during the time of the healing of this little wound, he became very impatient, and very violent, and very irritable, and really eventually unmanageable.

Q. This was after the operation, during the healing of the wound? A. Yes.

Q. Did you apply dressings or bandages to it? A. I did.

Q. And what did he do? A. Every day or every night I found that he had removed them; and not only had he removed them and torn them away, but he had been pulling himself about; so that he broke any little adhesions that might have taken place, and thus prevented the wound from healing properly.

Q. Was the wound likely to produce much pain? A. No; some degree of soreness, but not pain. You will understand that the operation produced pain, but not else.

Q. What was the consequence of his tearing away these bandages? A. That it prevented the wound from healing as well as it would have done otherwise, and also protracted the healing.

Q. What did his conduct become after that? A. He still continued very violent and unmanageable, and ungovernable.

Q. Were the people in the house kind and attentive to him? A. Exceedingly so—remarkably so.

Q. Could they pacify him or keep him in order? A. I believe they did for a time; but he would break out again precisely in the same way.

Q. After that, did he place himself under some other person? I believe he went away from Penshurst, did he not? A. He went away from Penshurst. I should mention that he had a strange delusion with regard to this—that his water passed through this fistulous opening; which was perfectly absurd, because before he left me the wound was healed; and under any circumstances it would have been ridiculous.

Q. You considered that to be a mental delusion? A. Utterly—quite so.

Q. As a medical man, having observed these symptoms and these circumstances, what was your opinion of the state of mind of the prisoner? A. I considered his mind in a very unsettled and unsatisfactory state.

Cross-examined by MR. BODKIN. Q. I believe I understand you to say that the operation which you performed was one calculated to give great pain? A. Not great pain.

Q. Did you ever have it performed upon yourself? A. No.

Q. Did he not evince the symptoms that a man would who was suffering from pain? A. Yes.

Q. That is the way I suppose that you would judge of whether an operation is painful or not? A. Under some circumstances; but some persons can endure pain much better than others.

Q. He acted as a man who felt that the pain was very great? A. Yes.

Q. And was a person impatient under pain? A. He did not manifest so much impatience then as afterwards; at the time of the operation he was very unwilling to submit to it,—I had to persuade him.

Q. Did you open the abscess? A. Yes.

Q. And did you then find a fistulous opening communicating with the interior of the rectum? A. I did.

Q. Did you follow that? A. I did.

Q. Did you cut it out? A. I did.

Q. That is, you introduced the knife into the rectum, and cut out the diseased part? A. I introduced the knife into the wound, and my finger into the rectum, and then drew it through, and thus divided the parts intervening.

Q. You do not mean to represent that as being an operation that was not attended with considerable pain? A. I do, for this very reason, that it was a very small and a very trivial one—I mean the wound itself.

Q. There was an external abscess? A. Yes.

Q. You made a wound in that? A. Yes.

Q. Did you also make another wound in the fistulous communication with the rectum? A. I made a wound by cutting through.

Q. Then you cut from the abscess, inwards? A. I cut outwards.

Q. Then you cut the abscess last, did you? A. No; the abscess was opened first of all.

Q. Then you introduced the knife into the interior of the rectum, and drew it outwards? A. Not exactly that; I introduced the knife into the wound, and my finger into the rectum, and then drew it out.

By MR. JUSTICE ERLE. Q. Do you mean that you did not put your knife further in the second operation, than the wound for the opening of the abscess? A. I do so.

Q. You put your finger into the rectum; you put the knife into the rectum as far as you thought the fistula extended, and then drew the knife out, opening the fistula? A. Yes.

By Mr. BODKIN. Q. Then the proper thing would be to introduce something to make it adhere? A. A piece of lint.

Q. The ordinary operations of nature would interfere with that, would it not? A. To a certain extent.

Q. And would keep up a certain extent of irritation and pain, would it not? A. No; because if the lint was properly introduced, and kept in, it would prevent anything from passing in that way by the wound.

By Mr. JUSTICE ERLE. Q. How so, if the wound was in the rectum? A. The lint is introduced for the purpose of healing it up from the bottom.

By Mr. BODKIN. Q. Surely when an operation of nature took place, it must affect a wound so circumstanced? A. No, not if the lint was well introduced.

Q. Do you mean that an exudation from the body would not touch the lint? A. Yes, most assuredly.

Q. And remove it, in all probability? A. No.

Q. Well, it would be a source of irritation to a nervous person, would it not? A. Yes, it would.

Q. I think you say that he appeared to labour under the notion that water or fæces came by that wound? A. Water—his urine.

Q. And he tore off the bandages? A. Yes.

Q. And so retarded, to some extent, and of course aggravated his sufferings? A. He did so.

Q. I suppose you find patients very frequently irritable and impatient under pain? A. Yes, but he was unusually so.

Q. He was very much depressed in mind, was he not, by the loss of his wife? A. He was.

Q. And then brought down still lower by this attack of disease? A. Yes.

Q. Not in a good state to sustain an attack of this kind? A. No.

Q. You have said that you thought his mind unsettled; will you explain what you mean by that? A. I said so for this reason, that I found he was complaining again and again to me of this extraordinary and unfounded delusion with regard to his passing his urine in this manner.

Q. That was the reason, was it? A. Yes.

Q. How long was he under your care altogether? A. I think about three weeks or a month.

Q. And then you lost sight of him? A. Yes.

Q. Was he at Simmonds' when you were attending him? A. I think part of the time.

Q. Did he go anywhere else afterwards at Penshurst? A. I think not; I think he then came to London.

Q. Did he appear to be in better spirits when he left? A. No; he appeared very much the same.

Q. Did you see him just before he left? A. No, I think not for a fortnight before he left.

By Mr. JUSTICE ERLE. Q. The witness speaks of more than one operation; was that the case? A. Yes, the first operation was only the abscess; the next was the operation for the fistula, and at the same time removing a couple of small piles.

Q. What length of time was there between the opening the abscess, and the operation for the fistula? A. I think it was on the following day that I operated for the fistula.

Q. Then was there another?—Cook speaks of three operations. A. There was no further operation as far as cutting was concerned; there was the dressing.

MITCHELL HENRY, Esq., Fellow of the Royal College of Surgeons, *sworn, examined by Mr. LE BRETON, for the prisoner.*—

Q. What are you by profession? A. I am a surgeon.

Q. You are attached to the Middlesex Hospital, I believe? A. I am assistant surgeon at the Middlesex Hospital.

Q. Do you remember the admission of the prisoner at that institution? A. Yes.

Q. Upon what day was that? A. I referred to the book and found that it was the 17th of August.

Q. Did you visit him? A. I did.

Q. Was that soon after his admission? A. Almost immediately, either the same day or the day after.

Q. How did you find him? A. Exceedingly depressed.

Q. What was his bodily ailment? A. He had the remains of a small fistula.

Q. Was it at all of a serious nature? A. It was so trifling that it could hardly be said to exist.

Q. Did you ask him to allow you to look at it? I did.

Q. What did he say? A. He became exceedingly excited when the subject was mentioned, and showed great terror of any examination, or of anything being done that could at all give him pain.

Q. What further did you observe in his manner at that time when you first saw him? A. Great irritability, and great excitability, and extreme depression.

Q. In what condition was the sore place, or the diseased part? A. There was the remains of a fistula, a very, very small sore, which had not healed.

Q. Did you do anything to it? A. I did.

Q. What was that? A. I divided a very little bit of skin that was there.

Q. Did you tell him anything? A. I told him that his complaint was exceedingly trifling, and that he would get well immediately; in fact, that there was no occasion for his having come into the hospital.

Q. And upon that did he say or do anything? A. He put up his hands in an entreating manner, and exclaimed, in broken English, "My fistule, my fistule!"

Q. Did he upon that occasion, or the next time you saw him, tell you anything about water? A. I think that was the next time that I saw him—he stated that his water was in the habit of passing through this fistula.

Q. Did you make any examination upon that head? A. Very carefully.

Q. Was there any ground for it? A. Not the least.

Q. Did you reason with him about it? A. I examined him repeatedly upon subsequent days, and reasoned with him and showed him that it could not possibly be the case; I passed an instrument into his bladder, and showed him in every way that it was an impossibility.

Q. Did what you said produce any effect upon him? A. It did not appear to do so; and I saw subsequently more clearly that it produced no effect upon him, when he became an out-patient.

Q. When did he leave the hospital? A. He left on the 2nd of September.

Q. That was when the cholera patients were admitted? A. Yes, in consequence of requiring the beds for cholera patients.

Q. Did he then become an out-patient? A. He then became an out-patient.

Q. Whilst he was an out-patient, had he anything at all the matter with him? A. He had no bodily ailment.

Q. He was cured of that? A. He was cured.

Q. Of his bodily ailment? A. Yes.

Q. Did he still talk about the water passing through the fistula? A. Whenever he came that was the statement that he made, that his water passed through the fistula.

Q. You still argued with him about it? A. I took a great deal of pains, in consequence of his melancholy condition, and his apparently friendless condition, to show him that it was absurd.

Q. I believe your expression was that you might as well have talked to a stone wall? A. Yes, you might as well have talked to a stone wall.

Q. Having observed the prisoner for this length of time, what was your opinion as a medical man as to his mental condition? A. I could have no doubt that he was not of sound mind.

Q. Did you form any opinion as to his power of judgment? A. From that circumstance he had no power of judging, and believed in the existence of that which was an absurdity—which did not exist.

Q. Then you considered that there was clearly the existence of mental delusion? A. No doubt it was so.

Q. You did not see him again after he left the hospital, I believe; did you see him when he was brought in? A. I saw him very shortly after,—he was attending at the hospital as an out-patient.

Q. But I mean after he ceased to attend? A. Yes, I saw him in the hospital.

Cross-examined by Mr. BODKIN. Q. You say you have no doubt he was a person of unsound mind? A. I have said I had no doubt he was not of sound mind.

Q. Is there a distinction then between the two? A. I mean his mind was not sound in that particular.

Q. Is there any difference between a man being not of sound mind, and being of unsound mind? A. I do not know that there is, but I wish to be careful, because I have reflected carefully about what I had to say.

By Mr. JUSTICE ERLE. Q. Your words are "I have no doubt his mind was not sound in that particular, respecting his water?" A. I have no doubt that his mind was not sound, and that it was shown in that particular.

By Mr. BODKIN. Q. Your opinion of the unsoundness of his mind is based entirely upon that fact? A. Not entirely.

Q. Upon what else is it based? A. From his exceeding depression and melancholy, and from the circumstance that I never could get any connected story from him; I never could get from him any account of how he came to suffer from fistula, who had operated upon him, or any intelligible account at any time; his mind seemed incapable of connecting his ideas together.

Q. Was he not very much depressed? A. Exceedingly depressed.

Q. Did he not tell you that he thought he had been ill or unskilfully treated by the surgeon who had operated upon him? A. He said very little about that; I have an impression that he said something of the kind when first I saw him,—not that he had been ill-treated.

Q. I believe you wrote to Mr. Baller the surgeon, in consequence of what the prisoner told you? A. No; I wrote to Mr. Baller after the crime was committed, when I found who it was. I felt persuaded that it was my duty to say that which I knew; therefore I wrote to Mr. Baller.

Q. Did not the prisoner give you the means of inquiring about the fistula, and the operation, in consequence of which you wrote to Mr. Baller? A. He told me in answer to the question, that Mr. Baller operated upon him.

Q. He told you he had been operated upon by Mr. Baller; did he tell you that he did not think it was skilfully performed? A. No, he did not say anything about it.

Q. I thought you said he did? A. I said when he first entered the hospital my impression was that he spoke of his fistula,—that it had been operated upon, and no good had been done by it; but the question as to who had operated upon him, was put recently, when in the hospital with his wound; I then asked him who had operated upon him.

Q. Was he suffering under piles when he first came in? A. No, he was not.

Q. Do you mean to say there were not piles? A. There were not.

Q. Are you positive? A. Positive.

Q. Is fistula a disease likely to return? A. It frequently does return. I know that when I last saw him he was not suffering under fistula,—when I last examined him.

Q. When was that? A. That was just previous to the murder.

Q. You have not seen him since in Newgate? A. I have not.

Re-examined by Mr. LE BRETON. Q. In your opinion, looking at the state of the fistula, how had the operation been performed—could you judge? A. The parts were quite sound where the fistula was; it had been performed in the most skilful manner; it had evidently been very slight and the parts were perfectly sound, with the exception of that little hole of skin.

Q. Which you say was very trifling? A. The merest remains of a little sore.

JOHN CONOLLY, Esq., M.D., sworn, examined by Mr. M'ENTEE. Q. You have devoted yourself for a number of years, I believe, to the question of insanity A. For a great number of years.

Q. How many years? A. I am afraid more than thirty.

Q. Have you given your attention particularly to the subject of insanity during that time? A. For the last sixteen years I may say exclusively,—at least, I practise exclusively in that department of medicine.

Q. Have you been present during the whole of this trial to-day in court? A. I have.

Q. Have you heard the evidence of all the witnesses who have been examined?
A. Every one.

Q. From hearing that evidence, what is your opinion of the state of mind of the prisoner at the bar?

[This question was objected to.]

Q. Have you formed any opinion with regard to the state of the prisoner's mind?
A. Yes, I have.

Q. What is that opinion? *A.* The opinion is—I agree with the last witness—that the prisoner was not of sound mind at the time when these circumstances that have been mentioned occurred—especially the delusion, which is perfectly inconsistent;—a man cannot be of sound mind and have an absolute delusion.

By MR. JUSTICE ERLE. *Q.* You agree that the prisoner was not of sound mind in respect of the delusion of his water passing through the place where the fistula had been? *A.* Yes, I conceive that is a delusion utterly inconsistent with soundness of mind.

By MR. M'ENTEE. *Q.* What other facts would you draw this inference from?

MR. JUSTICE ERLE. *Q.* Are there any other grounds upon which you found that opinion? *A.* An apparent change of character: from being a very mild and inoffensive person, to becoming sometimes excited, sometimes melancholy; his thoughts often dwelling upon suicide, and eventually, from inadequate causes, committing a great crime.

By MR. M'ENTEE. *Q.* From all those circumstances you give your opinion about his state of mind? *A.* That would be my medical opinion if such a case was laid before me in any shape.

By MR. JUSTICE ERLE. *Q.* Have you formed in your mind any notion of what is an adequate motive for a great crime? *A.* No, I speak only of the absence of an adequate motive.

Q. But if a person speaks of the absence of an adequate motive, it seems to me to require that the person who uses that term, meaning it, should have a notion of what is an adequate motive? *A.* I conceive that a stronger mind than that of the prisoner may be driven to crime by a combination of circumstances; but they must be much more severe and trying, it appears to me, than those to which the prisoner was subjected.

Q. Have you any measure for the intensity of love? *A.* I do not profess to have any.

Q. Would the pain of rejected love be in proportion to the intensity of it? *A.* It is very difficult to answer questions of that kind.

Q. I am obliged to put it to you, because your opinion is founded upon certain assumed facts; and it is my duty to ascertain what facts are assumed by you as the ground of your opinion? *A.* If I might explain myself, I should say that, supposing the deceased person, the man who was murdered, had murdered the object of the prisoner's love, or some violent offence of that kind was given.

Q. If the object of attack was the person who had prevented the continuance of an attachment, would that be a ground of hostility and revenge? *A.* I should think not at all, in a person whose mind continued sound. It might be a subject of great offence and continued pain, but not to lead to murder and outrage.

Q. Will any degree of attachment, and separation from the object of it, form a motive for revenge? *A.* No doubt it might, and in different ways in different minds.

Q. Is there anything of a tendency to assassination in different people? *A.* No doubt.

Q. Is the Italian temperament more swayed to fatal revenge from jealousy than more northern people? *A.* I believe it is generally considered so.

Q. So that, as to the facts certainly proved, your opinion would rest upon the delusion with respect to the water passing through the fistula? *A.* That I think quite a decided proof of unsoundness of mind.

This closed the evidence on both sides ; but it should be understood that the testimony of Mr. M'Murdo and Drs. Mayo and Sutherland was given after the evidence for the defence had closed, it being adduced for the purpose of rebutting the evidence of Dr. Baller, Dr. Conolly, and Mr. Henry. It was anticipated that Mr. Shaw, who had been subpoenaed by the Treasury, would also have been called on this side, but at the last moment it appeared that the prosecutors declined to place him before the jury ; and as the case was closed, the counsel for the defence could not then call him. They could only remonstrate against the cruelty of the proceeding, but in vain.

Mr. M'Enteer then replied for the prisoner on the whole case. He was followed by Mr. Bodkin, the prosecutor ; after which the Judge charged the jury, who retired for about a quarter of an hour, and returned with a verdict of *guilty*.

This seems the proper occasion on which to mention the damning effect produced by the observations addressed by the Judge to Dr. Baller, who had employed the term *melancholia*, as to whether there was any difference between *melancholia* and *melancholy*. It is only those who were present at the trial that can properly appreciate the thrill of horror that passed through the minds of persons unaccustomed to such scenes, when this inquiry was followed by a merry laugh. When was a judge's jest thrown away? Alas for truth ! ridicule is often a more potent weapon than the tongue of the ablest advocate. It was also sad to hear the repeated disagreement between the Judge and one of the prisoner's counsel. On one occasion, his Lordship told that gentleman, in reference to one of his questions addressed to a medical witness, that the witness could not understand what was meant, that he (the Judge) could not understand what was meant, and that he was sure the counsel himself did not know what he meant.

Who would give much for a prisoner's chance after this ?

Pass we now to what occurred after the fatal verdict had been given, and after the dreaded sentence had been pronounced, which, by the way, was unaccompanied by the slightest comment or observation from the Judge.

Mr. Shaw immediately addressed a communication to Sir George Grey, the Secretary of State, stating the circumstances connected with the suppression of his evidence at the trial ; and in conjunction with Dr. Conolly and Mr. Henry, he also signed a memorial urging that the execution of the unhappy man might be stayed until certain documents could, without delay, be laid before the Secretary of State, which it was believed would greatly extend and strengthen the evidence of his insanity. A reply was received, to the effect that it was impossible to interfere or delay the execution on a general statement of this kind. In the meantime, however, the most active steps were taken. The whole of the evidence of the various witnesses was collected and attested before different magistrates, and then laid before those medical men whose knowledge of the subject of insanity would be likely to carry weight with the Government and with the country. These various gentlemen made themselves masters of the facts,—no very easy

matter, considering the mass of documents to be read—and on the 23rd of April, the following memorial, together with the evidence in full, a synopsis of it for easy reference, a short explanatory letter, and the statement of Mr. Shaw, which we also reprint, was sent to Sir George Grey. An interview with the Secretary of State had previously been requested by these gentlemen, but was refused.

“ Memorial to Sir George Grey, Bart., M.P., Secretary of State for the Home Department, in favour of Luigi Buranelli.”

“ We, the undersigned Physicians and Surgeons, having carefully examined the evidence hereunto annexed, relative to the case of Luigi Buranelli, now lying in Newgate under sentence of death for murder, do hereby express our solemn and matured opinion that the prisoner was insane at the time he committed the crime.

“ We do further affirm that had we been consulted on the evidence now disclosed, as to the condition of the prisoner’s mind before the act was perpetrated, we should have had no hesitation in subjecting him to medical treatment for mental disease.

“ We, therefore, are confident that had the prisoner been in a different rank of life, such steps would have been taken respecting him as would in all probability have prevented the commission of the murder; and, accordingly, we earnestly pray that the extreme sentence of the law may not be carried into execution in the case of a person whom we believe to have been a lunatic when he perpetrated the act for which his life has been declared forfeited.

(Signed)

“ JOHN CONOLLY, M.D., Consulting Physician to the Hanwell Lunatic Asylum, &c.

“ WILLIAM BALY, M.D., F.R.S., Physician to the Millbank Prison, Assistant Physician to St. Bartholomew’s Hospital, &c.

“ FORBES WINSLOW, M.D., D.C.L., &c.

“ ALEXANDER SHAW, F.R.C.S., Surgeon to the Middlesex Hospital, &c.

“ MITCHELL HENRY, F.R.C.S., Assistant Surgeon to the Middlesex Hospital, &c.”

On Friday evening, the 27th instant, a reply was received, stating that the law must take its course.

The only hope now that the idea of the man’s insanity had been utterly repudiated and set at nought was, that a public appeal to the Home Secretary relative to the indecency of executing an unfortunate creature who had been deprived on his trial of such material evidence as that of Mr. Shaw, might be attended with some effect. Accordingly, Mr. Bright brought the subject before the House of Commons in a short but able speech on that same night, but met with no encouragement from Sir George Grey. On the Saturday morning, a further attempt was made to influence the Home Secretary, and a gentleman who holds the highest medical position in this country had an interview with him, and again brought under his notice the fearful responsibility incurred in executing a criminal respecting whose insanity such overwhelming evidence existed. All, however, was in vain. No doubt a painful but a mistaken sense of duty closed the doors of mercy, and the unhappy man was doomed to die.

Still one ray of hope remained. The suppression of Mr. Shaw’s evidence, simply because it was favourable to the prisoner,—for, from his long-continued observation of the man, before and after the murder,

he considered him "insane, and incapable of distinguishing right from wrong,"—seemed a circumstance so subversive of justice, and so contrary to our English notion of fair play, that, on Sunday night, the opinion of an advocate, not less distinguished for his learning than for his humanity, was taken as to any legal point that might be urged. Law and equity are not always, however, synonymous—and here, though equity was on the side of humanity, it was found that strict law could give no aid. Sick at heart, men not readily moved, and whose profession popular opinion sometimes believes to deaden the feelings, turned sorrowfully away. The Judge had already refused an interview to one of their number, on the ground that he had "no further power in the matter, and therefore considered it his duty to decline holding any communication whatever respecting it;" still, respect for the pure and unbiassed administration of justice might perhaps influence him, and, as a last effort, he was sought. Alas! he had gone to his country seat, and a very few hours afterwards Buranelli had ceased to live.

Of the manner of his death the public were duly informed by the following account, which appeared in the evening papers of the day of the execution, the 30th of April:—

"The fatal moment having arrived, the mournful procession was formed. The frame of the wretched man trembled violently, and at first he could not proceed without the assistance of Father Gavazzi, who walked by his side reading a chapter from the Bible, to which he audibly and fervently responded, from the cell to the scaffold, where he took his final leave of the sheriffs and the officials, the chapel bell of the prison sending forth its terrible knell, which acted as a signal to the crowd outside. The shouts and cries of the crowd of 'Hats off,' 'Hats off!' rang terrifically in the culprit's ear, and he trembled very much. Father Gavazzi assisted him up the steps, when he recovered his firmness, but on reaching the platform made a sudden stop, and gazed intently upon the sea of human faces before him, and trembled violently. Father Gavazzi spoke words of encouragement to him, and pointed out the crowd and the position he was to take under the fatal beam; he then mechanically, but in a trembling manner, gazed up earnestly at the chain and fatal beam for a few seconds; when he had withdrawn his gaze, he bowed to the crowd facing him and then to those on his right. Calcraft then placed the cap over his head, and adjusted the fatal noose, Father Gavazzi conversing with him to the last, which from his standing at the back of the wretched man, instead of the front, as the more practised and rev. ordinary does, caused the unfortunate man to turn his head. Father Gavazzi then left the platform, Calcraft shook hands with the wretched man, descended the steps, and withdrew the fatal bolt. Would we could add that the wretched man was in an instant banished into eternity; but it was otherwise; the sufferings of the unfortunate culprit were fearful in the extreme, and certainly such a painful and frightful picture of death caused by hanging has never been witnessed. After the drop fell, the wretched man became fearfully convulsed, and from the incessant and almost audible breathing and heaving of the chest for several minutes, the impression became general that Calcraft had failed to adjust the noose properly, and the indignation of the mob became furious. Cries of 'Shame, shame!' 'It is murder!' groans and hisses; and still the wretched man breathed and struggled on, his chest rising and falling the whole time. In this horrible state did the wretched man hang suspended for five minutes, before death put an end to his fearful sufferings. The indignation of the mob continued for some time. On hearing the tumult, Mr. Sheriff Alderman Muggerridge stepped forward to see what was the matter, when he felt horrified at the sufferings of the wretched man; but from inquiry that subsequently took place, it appears that Calcraft was not to blame. The Sheriffs were, however, very much annoyed,

and sent for a surgeon to be present when the body was cut down, and to examine whether the rope had been properly adjusted.

"At nine o'clock, Calcraft ascended the scaffold to cut down the body, when he was received with a perfect storm of indignation, and groaning and hissing, until he disappeared from the scaffold, having cut down the body,—the Sheriffs not allowing the rope to be removed until the body was seen by the surgeon. On examination of the neck by the surgeon, he said it had been properly adjusted, but the severe struggles might be accounted for by the extreme lightness of the body."

It may serve to show the difficulty of reaching the *exact truth* in all public matters, to observe, that the alleged "extreme lightness of the body" was a mere myth. Buranelli was a stout heavy man, considerably above the average weight.

The opinion entertained by Dr. Sutherland must have been a very tenacious one; for, previous to the execution, two interviews were had with that gentleman, in which, after Mr. Shaw's testimony, of whose nature he was ignorant when he gave his evidence, had been made known to him, Dr. Sutherland was urged to write to the Secretary of State, stating that he thought Mr. Shaw's evidence important, and that it ought to have been laid before the jury, and that the case was not entirely free from doubt. Acting, doubtless, under a strong sense of duty, Dr. Sutherland declined doing anything of the kind.

It is not the least of the extraordinary circumstances connected with this case, that no opportunity was given to Mr. Shaw, or to Mr. Henry, or to any one who had appeared on behalf of the prisoner, to be present at the post mortem examination which was made very shortly after the execution; but, in due time, the following paragraph appeared in the public journals. After the execution, "a post mortem examination of the body was made by the medical superintendent of St. Luke's Hospital" (the asylum to which Dr. Sutherland is physician), "when the brain and its membranes were found to be perfectly healthy, thus confirming the opinion of the jury as to the sanity of the man, and his consequent responsibility for the crime into which his nature had impelled him." Strange notions of the value of post mortem examinations in the brain of the insane must be entertained by those who are responsible for the paragraph; and stranger notions too of professional etiquette by those who could make that examination in the absence of all who had previously been in attendance on the prisoner, or had striven to arrest his fate.

It may be satisfactory to the reader to be assured that every statement in the preceding narrative is strictly accurate, the result of much labour, and derived, so far as the evidence is concerned, from the shorthand writer's notes, and in other respects from the accumulated testimony of those present at the trial.

APPENDIX,

Containing the Document forwarded by ALEXANDER SHAW, Esq., the Senior Surgeon of the Middlesex Hospital, to Sir GEORGE GREY.

In August last I was applied to by M. Battoni, an Italian, for a letter of admission into the Middlesex Hospital, for Buranelli, then residing at Penshurst, and whom he represented as suffering from a very bad fistula, which caused his urine to escape from behind. He had undergone an operation which, it was alleged, had been badly performed. I fancied that the case must be one of fistula in perineo, or perhaps recto-vesical fistula. Accordingly I furnished him with a letter, and on the 17th of August Buranelli was admitted into Handel's ward under Mr. Henry, then acting for Mr. De Morgan, whose week it was for receiving new cases.

Soon after his admission Mr. Henry told me that the patient was altogether mistaken about his complaint—that it was nothing more than a superficial fistula in ano—and he wished me to examine it along with him, as the patient was in a state of the greatest misery about it.

We had much trouble in getting the patient to submit to an examination; he exhibited signs of terror beyond what is usual, and behaved like a child; but we at length got a satisfactory examination.

All that I could see was, on the left side of the anus, a flaccid fold of the skin penetrated by a sinus, the length of which was about half of an inch, and so small that the probe seemed to fill it. Its internal opening was at the *verge* of the anus, and there was no branch-sinus leading more deeply. So completely superficial was it, that I took it to be (and I think I expressed myself at the time to that effect) the remains of an external pile, which having suppurated and broken, left the flap of skin hollow, or perforated by a sinus.

I inserted my finger into the anus, and felt all the parts above the sphincter, and the sphincter itself, in a perfectly sound condition. After the examination, Mr. Henry divided the sinus or bridge with a bistoury, and so thin were the parts cut through, that there was scarcely more bleeding than from the scratch of a pin.

During the patient's stay in the hospital, which was till September 2, I used to observe him in going my round of the ward, and found him always in a very melancholy mood. When in bed he would urgently beg me to look at his fistula, a request with which I once or twice complied, but usually declined, for when I did look at the anus, the wound was scarcely discernible, and I was assured he was going on quite well. The "Sister" often told me that she had never before seen such a childish man. And certainly his manner, when he was out of bed, indicated a looseness of spirits and timidity, greater than I have ever witnessed out of a mad-house.

At this time I had not been made acquainted with the full extent of his delusion about his disease, and the view that I took of him was, that he was hypochondriacal to an exaggerated degree. At length he was discharged in order to make room for cholera patients, at the time of the influx which commenced on the 1st of September. I then learned that he was reluctant to leave the hospital; upon which I remember remarking to the pupils, how strange that a man with an imaginary disease, should have a greater terror for a complaint which had no existence, than for such a formidable and real one as cholera.

I did not see more of him, and do not remember hearing more of him, till he came under my care on the 7th of January, 1855, for his self-inflicted wound after the murder. During that attendance, which lasted for twenty-two days, I did not perceive any new indications of unsoundness of mind. But I ought at the same time to say, that I did not subject him to any examination with the view of testing his mental condition. When I first visited him, he recognised me and called me by name. While operating upon him, he repeatedly asked for chloroform, a request with which I would not comply, as blood trickled down his throat, and I feared that from the insensibility and stertor produced by the inhalation, spasm of the glottis and suffocation might take place from the irritation of the blood falling upon the glottis. Besides that, he continually kept crying, "Let me die—let me die." Subsequently, his voice and manner showed great meekness and respect,

and were it not that he was obviously grieved at surviving the wound, I would have said that he was remarkably grateful for every attention. From the inflammation and suppuration which followed the injury, he must have suffered much pain, especially during the first week; yet I remarked when I probed the wound (with the view of ascertaining whether any of the wadding of the pistol lodged within reach) that he showed none of the extreme timidity and shrinking from the touch, which he had done when his supposed fistula had formerly been examined; he did not wince or withdraw his head, so much as an ordinary patient would have done. To show he retained the delusion about the water flowing from his fistula, I was present when Mr. Henry first saw him after his readmission for the pistol-wound; and that gentleman said abruptly—"Well, how is your fistula?" Buranelli, partly raising his head from the pillow, answered with great animation and an air of triumph—"Oh, you will see: I am going to die: you will open my flesh: and you will see that I am right. Aha!"

The conviction which I now entertain, that, when Buranelli committed the murder, his mind was not sound, rests mainly on his delusion concerning the urine passing through the fistula.

It is proper for me to state that it was not till I heard that Mr. Henry had formed a strong opinion that the man was insane, that I had a full account of the delusion, or considered it with due attention in reference to the question of insanity. But before I went into court on the day of the trial, I had made up my mind; and had I been examined, I would have said, that the idea of the patient about his urine, was an *insane delusion*—that it passed the bounds of an illusion from hypochondriasis, and was an evidence of insanity.

And here I may be allowed to remark, that it falls to the lot of the general physician and to the general surgeon to be consulted on cases of hypochondriasis quite as often, if not oftener, than to the physician of the insane; and as I have had abundant opportunities of witnessing the varieties of that disease, I do not consider it presumptuous to place my opinion against that of physicians following the special department of practice referred to.

First, as to the large quantity of urine supposed by the patient to flow from the fistula. From the evidence of Flower, the sister or head nurse of Forbes' and Handel's wards, corroborated by that of the nurse in Handel's ward, both women in whose veracity I have implicit confidence, and who were in hourly attendance upon him for sixteen days, it is clear that the patient imagined that the quantity of water which escaped from him from behind was very great. The expressions used were, that he thought he was "swimming" in his water—or that he was "swamped in his bed;" the witnesses further said, that when they removed him out of bed and showed him that the sheets were perfectly dry, he did not seem to be convinced; and in the course of a very short time afterwards he would repeat the same complaint, alleging that he was again swimming in his water: and the same thing went on during the whole day—to such an extent that Sister Flower, upon being questioned after the trial, said that it was not six times only during the day, but more probably sixty times, that he repeated the complaint, and requested to have a dry sheet to replace the wet one. Indeed, she added, he so completely tired her out (and the sister is distinguished for her painstaking and kindness) that she was often unwilling to go into the ward on account of the trouble he gave her; and this she mentioned to the matron at the time. It cannot therefore be questioned that the patient must have imagined that a most unusual and inordinate quantity of water must have been made to cause all this supposed wetness.

Again, as to the way in which the patient imagined that this large quantity of urine was passed, and the time of its passing; it was evident that he had the idea that it was flowing constantly and uninterruptedly from the supposed fistula; when he awakened out of sleep, he thought he was swimming in water; and when lying quietly in bed awake, he thought the same. There was nothing to show that he had the notion, which would doubtless have occurred to a rational mind, that the urine would escape in greatest quantity when he was voluntarily engaged in emptying his bladder; he never stated that it flowed most profusely from the fistula at these times. Moreover it never seemed to have occurred to him that from his making so much water by the fistula, there ought to have been a perceptible diminution in the quantity passed in the natural way.

The chief circumstance therefore in the patient's delusion, which influenced me in considering it a symptom of insanity, and not a mere effect of hypochondriasis, was, that in none of the many points relating to it, could his reason or common sense, or the evidence of his senses, be brought to correct his mistaken notions—when he both saw and felt that the sheets of his bed were dry, he persisted in thinking that they were wet—when he was assured that no communication between the bladder and fistula existed, and that there was no opening near the anus for the escape of urine, and when with his own finger he might have verified that assurance—he continued, nevertheless, week after week and month after month, to assert the contrary, and to be in a state of miserable despondency on account of it, when he might have known that if there were any foundation for his idea, the urine would have flowed most copiously during the act of micturition, which he did not pretend to be the case; and that owing to the continual discharge of water, as he supposed, from the fistula, there would have been a marked diminution in the quantity evacuated in the natural way. When none of these facts induced him to relinquish the idea, it showed that his intellect was incapable of following the simplest train of reasoning in regard to his malady. This confirms the evidence of Mr. Henry, who on being asked by Mr. Bodkin his reasons for thinking that Buranelli was not of sound mind, stated that he did not appear able to command his thoughts so as to give a consecutive or collected description of his complaint, either as to how it had commenced, when he had been operated upon, or what grounds he had for imagining his disease to be so bad as he represented it. And in my humble opinion, it establishes beyond question that the delusion was the result of a *diseased* mind—a mind affected with *insanity*, and liable to disordered associations, the connexions of which no sane person could trace or explain.

And here I beg to make an observation on the evidence of the medical witnesses for the prosecution. These gentlemen expressed the opinion that the prisoner was affected with "*hypochondriasis*" and was in a sane state of mind. When questioned as to the delusion about passing the urine by the fistula, they affirmed unhesitatingly that it proceeded alone from hypochondriasis—a complaint consistent with the sound mind which they supposed the patient to possess—Dr. Mayo said it was a *sane* delusion: Dr. Sutherland said it was not a delusion, but an *illusion*. Now, upon being asked to describe the nature of the disease called "*hypochondriasis*," both the latter gentlemen gave a correct and unobjectionable explanation of it; they said that it consisted in the patient having a complaint of a slight and trivial kind, which the morbid sensations of the sufferer magnified into a grave and alarming one, causing great depression of spirits and deep despondency about its cure. I could not, however, agree with Dr. Sutherland, who upon being asked by the counsel for the prosecution, with an object which was patent enough, whether hypochondriasis was a disease of the *brain* or not, answered it was not; adding, that the disease was seated in the *stomach*; which organ, he continued, sent up erroneous or false sensations to the brain, thereby producing despondency of spirits: now, if that opinion has any meaning at all, it signifies that the stomach, besides the powers of digestion, has an office like that of the sensorium, viz., a power of judgment and comparison, and of forming either correct or erroneous impressions, independently of the brain—a function which I believe no physiologist of past or present times ever before attributed to it. But the important point to which I am desirous of directing attention is this—that in the definition of hypochondriasis, the witnesses agreed in asserting that in order to give rise to the "*sane delusion*" or the "*illusion*" which characterised it, a *real malady*, trifling it might be, but having an existence, was a necessary condition. In Buranelli's case, the witnesses found that real malady, sufficient in their minds to explain his "*illusion*," in the circumstance that one of the witnesses had observed a *serous exudation* from the fistula: the presence, they said, of that serous exudation was enough to account for his exaggerated ideas about his sheets being constantly wet, and his swimming in his water, on the supposition that he laboured under hypochondriasis.

Now it appeared to me, sitting in court, that when such vast importance obviously attached to the serous exudation, much greater pains should have been taken to establish its existence by stronger evidence than that adduced. What did the statement rest upon? It rested wholly and exclusively on the evidence of Mr. M'Murdo. That gentleman said it was not until the very day of the trial, that

he had paid any attention to the fistula ; he was not aware that the patient ever said anything to him about his urine passing through it ; and he did not examine him on the subject till that time. When he did examine him, he found indications of piles, the remains of a superficial fistula, from which, he added, a slight exudation of serum was perceptible. In that statement consisted the whole evidence of a serous exudation from the fistula.

The first remark I would make is this : admitting Mr. M'Murdo's observation to be correct, or even supposing that the discharge of serum was greater in quantity than he expressed—that water flowed in drops, or in a stream, still I humbly believe that it had no application to the case. At the time in question when the patient was confined in Newgate, there was no evidence to prove that the delusion about the passing of his urine by the fistula continued. And even if it had continued, was there not time between the period of the patient's having been seen by Mr. Henry, and his being examined by Mr. M'Murdo, for the fistula to have broken out afresh, and a serious exudation, which had not existed before, to be produced ?

Before the medical witnesses had any right to draw so important a conclusion as they did from the serous exudation, they ought unquestionably to have inquired whether it existed or not during the time of the prevalence of the delusion—that is, more particularly when the patient was under the care of Mr. Henry. Now that gentleman's evidence gave no support to their assumption ; he affirmed positively that shortly after dividing the small bridle of skin (improperly called a fistula), the wound completely healed. For four months he had repeated opportunities of seeing the state of the parts, and he was ready to assert, that for ten weeks at least no breach of surface whatever in the neighbourhood of the anus was visible, and that if any moisture were present, it was not more than might naturally have been expected from the perspiration in the locality. And I may add, on my own part, that from what I saw of the alleged fistula, and could predict of the issue of the trifling operation which I witnessed, I have no doubt of the perfect truth of Mr. Henry's statement. Accordingly, it follows that at the period of the patient's case when he ceased to speak of the urine flowing by the fistula, and the delusion appeared to have left him for some time, Mr. M'Murdo observed once, and once only, a slight serous exudation from the remains of the fistula ; but that during the long space of time when Mr. Henry attended him, and the delusion was at its utmost, preying on his mind and making his life miserable, no serous exudation existed ! Where then were the grounds for Dr. Mayo, and Dr. Sutherland, maintaining that the patient was merely doing what hypochondriacal patients who are not mad are doing every day ; that he was really sensible of a serous exudation which kept the parts about the anus moist, and that he simply exaggerated that sensation, for which there was a foundation, into the idea of there being a large quantity of fluid which kept him swimming in his bed ? I am strongly of opinion that this attempt to prove the patient's case one of hypochondriasis, with the mind at the same time quite sane, altogether failed : however much I respect the gentlemen who made it, I believe they arrived hastily and inconsiderately at that conclusion ; and I think it was unfortunate for justice that the authority of their names should have been given to support an erroneous view, which must have had a powerful influence in leading the jury to find the prisoner guilty.

Having thus stated my conviction that the delusion and "melancholia" of the patient were the results of insanity, it only remains for me to add that the various incidents in his conduct brought out in evidence at the trial, or which have transpired subsequently, appear to confirm that view.

I attach much importance to the fact taken notice of by Dr. Conolly—viz., the marked change observed in the prisoner's disposition after what he himself termed his "many troubles," on which he brooded, commenced : from having been of a mild, amiable temper, he became after that time depressed, ungovernable at times, his thoughts occupied about self-destruction, and entertaining insensate suspicions and vindictiveness towards Dr. Baller. If we look upon him in his first character, that is, as possessing a sound mind, and of being of the good disposition and temper, to which so many excellent persons who knew him formerly testified, it does appear incredible, judging according to the general experience we have of the motives which commonly impel criminals to commit such acts, that the comparatively slight provocation he experienced could have actuated him not only to murder Mr. Lambert,

but to try to murder Mrs. Lambert, and after he had satisfied his revenge, to attempt to sacrifice his own life with his own hand.

Whatever may be thought of the ill-will which Mr. Lambert's conduct may have inspired, it is to be remembered that no attempt was made by the prosecutor to show that Mrs. Lambert had done anything to excite the prisoner's murderous passions. And as to Mr. Lambert, all that could be said was, that having been acquainted with Buranelli for many years, and uniformly kind and liberal to him, and having allowed him to live under his roof as a lodger, paying a very moderate rent, he at length obliged him to quit his house. The reason why he so obliged him was a representation made by another inmate, Mrs. Williamson. That female lived apart from her husband, and no attempt was made to investigate her character; but it appeared that she had allowed Buranelli to be criminally connected with her; and on the pretext, not very intelligible, of her being pregnant by him, she resolved to cast the prisoner off, and requested Mr. Lambert to dismiss him from the house. Now, it is important to bear in mind that Mrs. Williamson was mistress of her own actions, was independent of the Lamberts as she was of her husband, and that she might have continued to receive and cherish Buranelli as the parent of their future offspring had she entertained the slightest affection for him, or had not some other reason, which did not transpire, for getting him driven from the house. From the account given by Mrs. Lambert of the parting interview between the prisoner and her husband, it was evident that there could not have been any strong feeling of animosity between them, for some friendly discussion took place about the settlement of their accounts, and they all shook hands on leaving. In short, it is quite clear, according to the relation in which the parties stood to each other, and judging by common experience of the course of human passions, that it was against Mrs. Williamson, and not against Mr. Lambert, far less Mrs. Lambert, that we should have expected Buranelli, had he possessed his reason and been responsible for his actions, to have expended his wrath. Yet it did not appear that on the fatal day he could have had any intention of shooting that woman; for when after perpetrating the murder below he rushed upstairs, it was with one pistol alone in his hand; and when he shook Mrs. Williamson's door, and she inquired of him about Mr. Lambert, he replied by calling out that he was *dead*, and that he (Buranelli) was an *assassin*—the surest means of terrifying her and preventing her from admitting him. I concur, therefore, in the opinion given by Dr. Conolly in his examination, that for the committal of such a great crime—an attempt at double murder and suicide—there were not adequate motives; and that the act must have been prompted by insanity.

In conclusion, I repeat, that had I been called upon on the trial, to which I was summoned as a witness by the agents for the Treasury, to give my opinion of the state of the prisoner's mind when he committed the murder, I should have said that I considered him insane, and incapable of distinguishing right from wrong.

MEDICO-LEGAL OBSERVATIONS ON THE CASE.

It would appear altogether superfluous, after carefully perusing the preceding narrative, to encumber it with any lengthened medico-legal criticism. The facts demonstrative of Buranelli's insanity stand so prominently forward in the history of his life, are so obvious, conclusive, and transparent in their character, that it would be offering an insult to the understandings of our readers if we were to make more than a cursory allusion to them. There are, however, a few points in the case which we cannot, without doing violence to our sense of duty, pass entirely over. We refer particularly to the adverse medico-legal evidence that decided the fate of Buranelli. We are bound to subject this evidence to a strict and rigid analysis. Before, however, entering upon this division of the subject, we would, in general terms, refer to some of the more salient facts of Buranelli's history, which we conceive to throw considerable light upon his subsequent conduct and to particularly illustrate the state of mind leading to the act of crime for which he suffered the penalty of death. It is evident that soon after the loss of his wife, Buranelli's character underwent a marked and important change. He became in many respects an altered man. This fact was obvious to all his friends, and was made the subject of frequent comment among those who felt interested in his welfare. His mind was palpably unhinged, and his conduct, to a certain extent, corresponded with this mental change. Contemporaneously with this difference in his character, he became the subject of profound mental depression; in fact, to what is termed "melancholia." His mind was clearly disordered, his feelings perverted, and his sensitiveness, owing to the state of his brain, became morbidly acute. To the most casual observer the man's mind was affected. Previously to the manifestation of the mental alienation to which we refer, the evidence of those competent to give an opinion on the subject establishes beyond a doubt that Buranelli was a cheerful, industrious, well-behaved, kind-hearted, and sober man. His conversation and actions won the confidence, esteem, and respect of all who were brought into association with him, and persons much his superiors in station of life became greatly attached to him. Dr. Baller affirms that Buranelli was always considered to be a "mild, inoffensive, and respectable man." Such was his *healthy character*, as many could testify, prior to the occurrence of the domestic affliction to which we have previously adverted. In the spring of last year his wife died shortly after or during her confinement. Buranelli appeared to feel the shock of her death severely. He soon afterwards became, according to the evidence of Dr. Baller, "melancholy and extremely depressed, and his

disposition much altered." He was irritated at trifles, often greatly dejected, and frequently morose. Like most persons afflicted with melancholia, he courted solitude, "wandering about by himself." As we should *à priori* have expected, the suicidal idea about this period haunted his mind, he frequently spoke of self-destruction; and it is said, that on one occasion, with a view of carrying his threat into execution, he made an effort to purchase some laudanum. Failing in this, he endeavoured to persuade a man to shoot him; not succeeding in effecting his death in this manner, he left his home with the firm intention of drowning himself. A friend, observing his deep dejection, and suspecting from his conduct and conversation that Buranelli was about committing an act of violence upon himself, had the good sense and humanity to keep him under close surveillance until he could be transferred to the safe custody of his brother-in-law. Shortly after this Buranelli had to undergo a trifling surgical operation. "After the operation," says Dr. Ballar, "he became very irritable and impatient, removing the lint, and tearing away whatever dressings were applied to the wound. Eventually his conduct became so violent and his temper so ungovernable, that no one could do anything with him." About this time clear, positive, and unmistakeable delusions were developed. He firmly and stoutly maintained that his bed was constantly swimming with water. He repeatedly asserted this to be the fact, with all the tenacity usually accompanying the delusive ideas of the insane. It was useless to attempt to reason or laugh him out of his absurdity. Although he saw that his bed was dry—that the sheets and blankets had not a drop of moisture attached to them, he persisted in maintaining that he was swimming in a pool of water. At this period no sane man questioned Buranelli's insanity, if the existence of symptoms of acute melancholia, accompanied by a positive delusion, at all established the presence of the disease. Dr. Ballar, who attended Buranelli, and who performed the trifling operation for fistula, was extremely kind and attentive to him during his illness. Did he appreciate this kindness and speak of Dr. Ballar as a sane man would do? Instead of entertaining a grateful recollection of the skill and attention of his physician, he harboured feelings of bitter animosity against him, and entertained the wildest delusions with respect to his conduct. He said that he had treated him like a brute, and had tried to poison him. So strongly impressed was Buranelli with this idea of poison, that he carefully concealed the medicine Dr. Ballar ordered for him, and positively refused to take it. This delusion with regard to Dr. Ballar continued to influence Buranelli's mind up to the time of the murder, as would appear from the following entry which was discovered in his memorandum book after his committal:—"I have been assassinated

by Dr. Baller, of Penshurst, of Kent. Open my flesh after I am dead, and you shall certify how I have been treated. Yes, open my lacerated flesh, and you will be astonished. If I have done wrong, it is the law that must punish me, and not the doctor, nor the priest."

Need we proceed any further with the analysis of Buranelli's history? Have we not advanced sufficient evidence to carry conviction to every right-thinking, humane, and enlightened mind? If Buranelli was not insane, what was his state of mind at the time to which we refer, and what terms are we to use to designate it? If an experienced medical man had been consulted professionally in a case manifesting such symptoms, and a question arose as to the treatment necessary not only for the *cure* but the *safety* of the patient, what course of procedure would he have prescribed? Here was a man whose ideas and actions had undergone a complete change as the result of a great shock to the nervous system, consequent upon the severest affliction to which a human being can be exposed. Associated with these marked alterations of character (alone symptomatic of mental disorder) he became subject to profound mental depression, accompanied with a disposition to suicide. Whilst in this state of morbid mind delusions arose, one having regard to himself, and the other referring to his medical attendant. Do our readers for one moment imagine that if any physician conversant with this phase or form of mental derangement and brain disease had been consulted as to Buranelli's condition and treatment, he would have hesitated for a single instant in coming to a decision? Certainly not. Without any doubt he would have said, not only that the mind was clearly deranged, but that the patient, in consequence of his suicidal propensity, was unsafe to be at large. Would any medical gentleman have refused to sign a certificate of insanity in Buranelli's case, if he had been consulted as to the propriety of the step? We do not think he would for a moment have hesitated in complying with the request.

After his admission to the Middlesex Hospital, he came under the combined observation of Mr. Shaw and Mr. Henry, the surgeon and assistant-surgeon to that institution; and they perceived what others had the sagacity to notice, viz., palpable mental derangement, with clear and unquestionable delusions. So obvious was his unhappy state of mind whilst under treatment in the Middlesex Hospital, that the nurses frequently spoke of him as the lunatic—the insane man. It is not necessary for us to recapitulate the evidence that Mr. Henry gave at the trial, or the facts detailed in Mr. Shaw's able statement. To that evidence and statement we particularly call the earnest attention of our readers. Mr. Shaw's detail of facts should settle the question, if it

stood alone unsupported by other evidence, and remove all doubt as to Buranelli's insanity.

Having made these preliminary remarks, we now proceed to address ourselves specially to the scientific medico-legal evidence upon which the whole case hinged. But before doing so we would refer to an important feature in the trial, and one which we conceive, in a great measure, decided the issue in the hands of the jury: we allude to the unjustifiable suppression of Mr. Shaw's evidence. This gentleman was well acquainted with the facts of Buranelli's case. He had often seen him and observed his state, and was in a position to give valuable and material evidence to the court. Although Mr. Shaw was subpœnaed by the Crown, was under subpœna for three days, and was present during the whole of the trial, he was not called, under circumstances which trumpet-tongued speak for themselves. The prosecutors had subpœnaed him under the erroneous idea that his opinion of the state of Buranelli's mind was opposed to that of his colleague, Mr. Henry; but when on a private examination conducted whilst he was in court, they found that he was convinced of the unfortunate prisoner's insanity, they not merely neglected, but refused to place him in the witness-box! They were urged by the prisoner's counsel to do so, but absolutely declined, alleging the technical excuse that *his name was not on the back of the Bill of Indictment!* Will it be credited that the names of the medical witnesses, Drs. Mayo and Sutherland, and Mr. M'Murdo, whom the Crown did call, because it suited them to do so, were also *not on the back of the Bill of Indictment?* Who is to blame for this serious and censurable omission? For what purpose was Mr. Shaw served with a subpœna, if his evidence was not deemed essential to the elucidation of the truth? Does not this look like a wilful *suppressio veri*? In a case like the one we are considering, where human life was at stake, was it just or humane to withhold his testimony from the jury? In every point of view, it is a source of deep regret that Buranelli was deprived of the advantage of Mr. Shaw's valuable evidence. The three medical witnesses who appeared in behalf of the Crown against the prisoner, and consequently in opposition to the plea of insanity, were: Mr. M'Murdo, Dr. T. Mayo, and Dr. A. J. Sutherland.

Mr. M'Murdo's evidence is not material; he confined himself to the result of his own personal observation. He alleges that he saw no insanity in the prisoner during his confinement in Newgate. Drs. Mayo and Sutherland also visited Buranelli, in order to ascertain his state of mind, and on the day preceding the trial they saw and examined him. At this part of the case we are bound to pause. How often do our readers imagine these physicians saw Buranelli, and for what length of time did they examine him? In a case of this grave import-

ance, in which an attempt was made to obtain an acquittal on the ground of insanity ; in a case where the life of a fellow-creature was dependent upon the nature of the medical evidence, one would have conceived that, in justice to the prisoner, he would have been subjected to the severest and most searching of medical scrutinies, and that with this object in view repeated visits would have been paid to him by those delegated by the Crown with the authority of testing his sanity and responsibility. In civil cases, in which the question at issue is one of mere mental competency to manage property, the medical witness is not contented without instituting several carefully-executed examinations of the party alleged to be of unsound mind. Although the mental aberration may be easily perceived, more than one visit is generally paid to the party, so important is it considered, even in these comparatively speaking simple cases of a civil character, thoroughly to investigate the state of the mind. It is manifestly unsafe and palpably unfair to those whose capacity is made the subject of litigation, to restrict the examination to one interview. If such a careful and jealous mode of examination is indispensable in mere *civil* cases *à fortiori*, how imperatively necessary is it for the scientific witness in cases of a *criminal* character to investigate fully, carefully, repeatedly, and at great length, the state of mind of those alleged to be insane, and who are on the eve of being tried for the commission of a capital crime ? Drs. Mayo and Sutherland examined Buranelli only on ONE OCCASION—viz., on the day preceding his trial, *a period of nearly three months after the murder*, and then only for ONE HOUR AND A HALF ! Our readers will hardly credit this statement, but the fact is upon record. We ask those practically acquainted with the phenomena of insanity, we appeal to men in the habit of seeing the insane ; we put it to those accustomed to examine doubtful, difficult, and obscure cases of lunacy, whether they would in a case like Buranelli's have been satisfied with *one* examination, and that examination of an hour and a half's duration ? Even if the insanity of this unhappy lunatic had been self-evident, we maintain that no scientific medical witness ought to be satisfied with such a superficial investigation of the case. Supposing insanity to be feigned for the purpose of escaping punishment, could that be detected in *one* examination ? Drs. Mayo and Sutherland, on visiting a prisoner even on two or three consecutive occasions, might find him apparently in a paroxysm of violent mental aberration ; but on a third visit the mask may be dropped, and the case be obviously one of feigned disease. If we are to follow the example set to us by these physicians, great criminals may easily escape the hand of justice, and persons decidedly insane and irresponsible be handed over to the tender mercies of the public executioner. There are cases of insanity,—of undoubted lunacy,—of dangerous

mental derangement, that we would defy even experienced men to detect even in three or four carefully-executed examinations. We have known persons of whose insanity there could be no doubt, set for a considerable time at defiance men of great skill and intelligence. This disease, particularly in some of its more subtle forms, cannot be discovered as easily as many are led to conceive by what they find recorded in books. Delusions do not always manifest themselves even when the chord is touched. Hallucinations and illusions are often designedly concealed, with the view to sacrifice of life. Then how jealous we should be in our examination of these difficult cases! what caution is necessary before pronouncing an opinion! how carefully we should tread upon such dangerous ground!

We again record it as our deliberately-formed opinion, and we do so as a grave caution for the future, that Buranelli ought never to have been executed upon the evidence of two physicians who had only subjected him *to one visit of an hour and a half's duration, and that visit occurring but one day before his trial!*

Having made these prefatory remarks, we proceed to the consideration of the medico-legal evidence of Dr. Mayo, who was the first scientific witness called. It will be perceived by his testimony that he entirely repudiated the idea of Buranelli ever having had what he termed an insane delusion.

"It was not," says Dr. Mayo, "*in my eye strictly an insane delusion.*" That is, Buranelli's repeated assertion that there was a "slight dribbling of serous fluid from an old wound," his firm belief in the idea that his "bed swam with water," were not properly, in Dr. Mayo's estimation, insane delusions. What does Dr. Mayo mean by the term "insane delusion?" Surely there cannot be a sane delusion? A delusion, in the right acceptation of the term, is a *pathological* result. We are aware that the phrases "delusion," "illusion," and "hallucination," are used by some medical men loosely and unphilosophically. This is much to be regretted. It is as absurd to talk of a "sane delusion," a "healthy illusion and hallucination," as to speak of healthy bronchitis, healthy indigestion, healthy cough. "Sane delusions" and "healthy illusions" are pure phantoms of the imagination, conveying no accurate or scientific idea to the mind. A man cannot be sane and insane at the same time. If a delusion exists, if a person believes something absurd and extravagant to exist which has no existence apart from himself, the idea being palpably a creation of his diseased imagination, he is to all intents and purposes insane and of unsound mind. If a man's senses deceive him, if he arrives at erroneous conclusions, if his mode of ratiocination from acknowledged premises is absurd, and even extravagantly outrageous and illogical, he

cannot properly be said to labour under "sane delusions." The basis of an insane delusion, says Dr. Mayo, is "false perception." There are many false perceptions that cannot properly be designated as delusions. If all persons whose perceptions are false are to be considered and treated as insane, where should we find the asylums in which to confine them? Buranelli was under a clear delusion when he maintained that his "bed was swimming with water," there not being the slightest fact to warrant such an impression. But, says Dr. Mayo, there were circumstances that justified the idea,—*viz.*, "the slight dribbling from the wound." Now, unfortunately for Dr. Mayo's theory, there was not the semblance of any dribbling from the wound. Mr. Shaw and Mr. Henry, gentlemen of great veracity, of high honour and integrity, and both competent to the right exercise of their senses, closely and minutely examined Buranelli's surgical state, and they affirm that there was no dribbling of the kind described by Dr. Mayo, and that the notion that Buranelli entertained about the "bed swimming with water" was an entire creation of his distempered fancy. But we will, for the sake of argument, assume that Dr. Mayo was correct in his physical view of Buranelli's condition, and that there really existed a small wound from which a little fluid exuded, what does it prove? Buranelli's sanity and mental soundness? Certainly not. If a man has a slight sore on the foot, and he allows his mind to morbidly dwell upon the fact until he firmly believes that his leg and body are in a state of mortification, and that death must inevitably ensue as the result of his physical malady, if no argument can convince him of the absurdity of his ideas, and he acts under the influence of this impression, surely no right-thinking person would hesitate for a moment in pronouncing the mind not only unsound, but under the dominion of positive and clearly-manifested delusions? And if in such a case the patient attributed his physical state, not to the operation of natural, internal, and external agents, but to the baneful influence of a physician who had treated him with great skill and invariable kindness; and if, in addition to this insane belief, he harboured the idea of destroying the life of his benefactor, what conclusion would be inevitable in the event of the question of sanity and responsibility being raised in a court of law, and the life of the culprit depended upon the issue?

Such was Buranelli's case, as we shall presently demonstrate. But to proceed with our analysis of Dr. Mayo's evidence. It is an admitted fact that in numerous cases of insanity, the delusions, when they exist, may be traced to actual facts and circumstances. Insanity often exhibits itself in a morbid exaggeration or perversion of facts. Dr. Mayo would deny any impression, however extravagant and absurd,

to be delusive and symptomatic of insanity, that was justified by positive physical or moral conditions. This is a serious and grave error. Dr. Wood, when referring to this point, in a sensible letter published in a contemporary, observes:—

“A wrong impression may, assuredly, be the result of an unsound state of mind, whether it has some trifling foundation, or is without any ground whatever. Mental unsoundness is not a positive quantity which can be demonstrated; it is a comparative condition which can only be determined by observation, aided by the weight of evidence, which often requires to be very nicely balanced; and if we persist in setting up a fanciful standard by which to judge all cases, we shall always see the same conflicting testimony offered by medical witnesses which has brought so much discredit upon all professional evidence.”*

If we are to understand by the term “wrong impressions” delusive ideas, then we affirm that this is the right view of the matter. If we adopt Dr. Mayo’s test of delusion and insanity, we shall be obliged to ignore many cases of positive and dangerous mental derangement. As we should regret to convey a false impression of Dr. Mayo’s evidence on this important point, we prefer quoting his own words:—

“Q. If a man fancied that he passed water in enormous quantities, and that his bed was swamped, and if it was proved that he did not do it, and he was shown that the sheets were not wet, would not the two specifics for your delusion exist?—A. I have already explained that there is a form set apart, called *hypochondriasis*, which begins with certain grounds; *now the false perception, which is a real delusion, has no grounds*; but the hypochondriac starts upon perhaps most trivial grounds, and the molehill grows into the mountain, and the expression of swamping perhaps takes place: that is a totally different thing from what I mean by a delusion.”

It would appear from the above that it was evidently the object of Dr. Mayo and Dr. Sutherland to lead the jury to believe that Buranelli, according to the received acceptation of the term, suffered from *hypochondriasis*, and not insanity; that his delusions about his bed, &c., were only exaggerations of physical disease, merely illustrations of acute morbid nervous sensibility, leaving his mental faculties unimpaired. Grave and fatal mistake! We maintain that there were none of the well-known and generally-recognised symptoms of *hypochondriasis* about the case. If there were in the early period of Buranelli’s strange and eventful history facts to justify such a diagnosis, who endowed Drs. Mayo and Sutherland with the ability to trace the boundary line between *hypochondriasis* and insanity? Does not the one state often almost imperceptibly merge and blend into the other? And if there had existed the faintest shadow of a doubt as to the question whether the line of demarcation had not been overstepped, the unhappy prisoner should undoubtedly have had the benefit of it.

Dr. Mayo was compelled to admit, in answer to a question, “whether

* “Medical Times and Gazette,” May 11.

hypochondriasis did not occasionally merge into insanity?" that such was the fact; but he adds, when pressed upon the point as to the blending of hypochondriasis with insanity, that there existed an "*immense difficulty in drawing lines.*" How was it, then, that with an apparently right appreciation of the "*immense difficulty in drawing lines,*" he had the courage—shall we say rashness?—to make the effort, and that, too, in a case where the life of a fellow-creature rested upon the accuracy of his conclusions?

Mr. Mitchell Henry, in a series of communications addressed to the "*Medical Times and Gazette,*" has with much acuteness and ability criticised the medical evidence of Dr. Mayo. We quote the following passage in confirmation of our view of the matter:—

"Dr. Mayo affirmed that, in the conversation he had with the prisoner, he saw no symptom of aberration whatever, and then proceeded to observe: 'I should conceive, considering the nature of the delusion—which was not in my eye strictly an insane delusion, considering the extreme excitability and the sensitive state of his mind, that all his peculiarities might be accounted for, without supposing anything more than hypochondriasis.'

"This phrase, 'might be accounted for,' appearing very indecisive, the Court repeated the answer, substituting *would be for might* be accounted for; but Dr. Mayo appeared to feel that this mode of putting his opinion was too strong, and reiterated: 'All the symptoms that looked like insanity might be accounted for by that' (hypochondriasis). A little later on, however, with diminishing caution, he proceeds to say: Hypochondriacs 'more frequently exaggerate a symptom, and I imagine that to be the case in this instance; they may generally be traced to some trifling foundation. I certainly do not consider that persons exaggerating in that way can be at all properly classed with those of unsound mind;' and then he adds, 'you would extend a very dangerous excuse if you did.'

"Next, in cross-examination, Dr. Mayo still insisting that the prisoner only exaggerated an actual symptom, although it had been sworn that there was no real foundation whatever for the idea that possessed his mind, is therefore asked, 'Then you would consider that a man who said his bed was swamped, although it was repeatedly shown that there was not a drop of water of any kind in his bed, and that delusion being still persevered in, day after day, was not under delusion?'—and to this he feels obliged to reply, 'It would be a very strong case, I admit; there is no question about it.'

"Again, however, Dr. Mayo repeats that Buranelli had no delusion, properly so called, and gives the following reason for his opinion:—'I have already explained that there is a form set apart, called hypochondriasis, which begins with certain grounds: now a false perception, which is a real delusion, has no ground; but the hypochondriac starts upon, perhaps, most trivial ground, and the molehill grows into a mountain, and the expression of 'swamping' perhaps takes place; that is a totally distinct thing from what I mean by delusion.'

"'A real delusion has no ground.' Surely this assertion is incorrect. I am assured that, on the contrary, most delusions are exaggerations of actual circumstances, and not wholly new creations of the mind; although it does not follow that we can always penetrate into the lunatic's brain, and ascertain what those circumstances have been. A casual look of a passer-by is exaggerated into studied and systematic insults; a word of remonstrance from a friend is magnified into boundless cruelty and oppression; a trifling departure from strict morality is augmented into unheard-of wickedness and crime, and each of these delusions has commenced in a 'molehill,' and grown into a 'mountain.' Often, too, we may not learn what it is that set the patient's imagination at work until after his recovery he tells us of some chance event that we had quite forgotten.

"Lastly, the witness is asked as to the probable effects of the loss of blood and

the seclusion the prisoner had undergone, in quieting his mind and restoring it to a healthy state—the object having been to show that Buranelli might have been insane when he committed the murder three months before, although Dr. Mayo could not detect insanity when he visited the prisoner a few hours before the trial. The replies are very remarkable: ‘The prisoner has the constitution not of our clime: he has the Italian pulse, but a very small one, and a nervous constitution; and I should very much doubt whether bleeding would suit him under any circumstances, at least they must be very extraordinary circumstances. I carefully felt his pulse.’

“Is this what Dr. Mayo means by ‘philosophical empiricism?’ It seems hardly possible to study this medical evidence without fearing that Buranelli was sacrificed to a love of terms and an assumption of exact discrimination such as no human being possesses.

“The key to Dr. Mayo’s evidence is, I think, to be found in the following extract from his recently published lectures. The medical witness is summoned in courts of justice ‘in order to enable the judge and jury to arrive at certain practical conclusions, by virtue of his applying certain terms to which, as we have observed, a given meaning has been annexed, or negating their application to the person under trial or examination, according as the matter be civil or criminal.’ The terms to be applied here apparently were hypochondriasis and insanity, the one having responsibility attached to it, the other irresponsibility; and accordingly, ‘philosophical empiricism,’ and as Dr. Mayo elsewhere expresses it, ‘adventurous speculations,’ duly enabled him to reconcile inconsistencies and to enunciate exact laws to the jury where in the very nature of things exactness is impossible.

“Dr. Mayo’s evidence in this case seems to me irreconcilable with the principles laid down in his ‘Lectures.’ He there argues strongly against the plea of what is called moral insanity, and affirms that ‘the true criterion of irresponsibility is where the insanity involves intellectual as well as moral perversion;’ and he speaks further of ‘the mischievous neglect of the intellectual criterion’ in such cases. How Dr. Mayo can resist the evidence of ‘intellectual perversion’ in Buranelli is amazing. Delusion the most extreme, involving not merely himself, but the perpetual wetness of the bed in which he lay; his whole acts regulated by that intellectual delusion; his journey to London to get cured of it; his contemplated journey to Paris because the doctors here could give him no relief; his letters written just before the murderous act, breathing vengeance against the supposed author of his delusion; and a dulness and stupidity of intellect so extreme that in the letter I addressed to the sheriffs, long before there was any one to assist in the defence of insanity, I thus expressed myself: ‘I can conscientiously say that such was my opinion of his mental capacity, and so greatly did his powers of judgment appear to be impaired by his delusion, that under no circumstances should I have employed him, even in the most trifling business of every-day life.’

“I stated distinctly on the trial that, during the four months he was under my observation before the murder, ‘I could never get an intelligible account from him’—‘his mind seemed incapable of connecting his ideas together;’ and the correctness of this assertion was borne out by all the other witnesses.”

Having directed attention to the weak points in the evidence of the first scientific witness, Dr. Mayo, and, as we flatter ourselves, having established that, upon such evidence, Buranelli ought not to have been hanged, we proceed to the ungracious task of subjecting the testimony of Dr. Sutherland to the critical ordeal. We sincerely regret to find Dr. Sutherland following closely in Dr. Mayo’s wake, and doing his utmost to excel him in the extravagance of his medico-legal opinions. It is evident that Drs. Mayo and Sutherland had carefully compared notes before going into court, and that the Counsel for the Crown was conversant with the nature of the evidence they were prepared to give. Dr. Sutherland’s testimony was, in its most material parts, a mere

echo of Dr. Mayo's metaphysical flights of fancy ; for he not only adhered with great tenacity to the theory of hypochondriasis propounded by the former witness, and out-Heroded Herod by rashly attempting to draw a distinction between the *illusion* of hypochondriasis and the *delusion* of insanity, but also enunciated a new and startling hypothesis respecting the nature and seat of hypochondriasis. Dr. Sutherland was asked the following questions :—

Q. Where is the seat of hypochondriasis ? A. In the nervous system.

Q. Is it not in the mind ? A. *It is seated generally in the stomach ;* it is the effect of the nerves of the stomach conveying false notices generally through the system to the brain.

Q. May not hypochondriasis proceed to mental disease ? A. Yes.

In the first answer Dr. Sutherland points to the nervous system as the seat of hypochondriasis ; but he appears subsequently to have imbibed more enlarged views of the locality of the affection, and refers the disease to the *stomach*, asserting that it is the effect of the gastric nerves conveying false notices to the brain ! Strange pathology ! Still stranger physiology ! According to these novel views it would appear, in the words of Mr. Shaw, "That the stomach, besides the power of digestion, has an office like that of the sensorium, *viz.*, a power of judgment and comparison, and of forming either correct or erroneous impressions, independently of the brain—a function which no physiologist of past or present times has ever before attributed to it." Dr. Sutherland is subsequently asked the subjoined interrogatories :

Q. If you find in combination with hypochondriasis *suicidal notions* and tendencies, and *general depression and melancholy*, would you not consider that evidence of a mind not sound ? A. It would go a long way to constitute mental unsoundness.

Q. What would it require ? A. DELUSION.

It would appear from this answer that Dr. Sutherland considers delusion to be *the test* of insanity ; for he maintains that *hypochondriasis, combined with a suicidal tendency, and associated with general depression and melancholy, are no evidences of mental unsoundness unless delusion be present !* Dangerous and fatal doctrine ! We much question whether Dr. Sutherland will find a single British, American, German, or French psychologist who will agree with him in this opinion. Surely Dr. Sutherland must often have seen acute and dangerous cases of insanity and mental unsoundness unassociated with any form of delusive impression ? Everyone practically acquainted with the phenomena of insanity, and experienced in the treatment of the insane, will easily call to mind instances of insanity in which no delusion could be detected ; acute suicidal melancholia often exists without

the shadow of a delusion. In these cases of mental depression suicide is often committed. But this is not the only novel view of insanity propounded by Dr. Sutherland in the course of his evidence. It would appear that he repudiates the idea of insanity unless the actions alleged to be symptomatic of mental derangement are *motiveless in their origin*. "The acts I have heard of," says Dr. Sutherland in reply to a question respecting the prisoner's alleged insane conduct, "I do not consider to be *motiveless*, and THEREFORE the result of insanity." Does he believe that the insane always act without motive? Persons confined as lunatics,—undoubtedly insane, manifestly of unsound mind,—often act under the influence of the same feelings, motives, and passions that are known to affect the actions of sane, rational, and healthy minds; and they act too with a degree of self-possession, cunning, and ingenuity of contrivance that would do credit to men of strong intellect and great intelligence. But the salient point in Dr. Sutherland's evidence is embodied in his hazardous attempt to make a distinction between the "*illusions the result of hypochondriasis*," and the "*delusions the effect of insanity*."

In reply to the question—Was not Buranelli under the influence of a delusion when he persisted in asserting that his bed swam with water, after he was repeatedly assured that there was not the slightest foundation for the idea? Dr. Sutherland said, "No, he was not;" and when asked to explain the nature of the impression on Buranelli's mind, he rejoined, that it was "an *illusion of hypochondriasis*, and not a *delusion of insanity*." In justice to Dr. Sutherland we are bound to confess that the term illusion is often used by eminent authorities to characterise the impressions conveyed to the brain by external agents. Illusions and hallucinations are considered to be rather psycho-sensorial, or as purely psychical in their origin; the former, according to Baillarger who makes the division, being the result of a double action of the imagination and the senses, and the latter arising from the involuntary exercise of the memory and the imagination. A psycho-sensorial hallucination, or illusion, is defined by Baillarger to be a sensorial perception independent of all external excitations of the sensuous organs. Psychical hallucinations are perceptions purely intellectual. "The illusions," says Briere de Boismont, "which occur in a healthy condition, are corrected by reason." This eminent authority subsequently admits that "illusions, as well as hallucinations, have their seat in the brain." He again observes that "*illusions in sane persons are corrected by observation and judgment, and have besides no influence upon their general conduct*." What Drs. Mayo and Sutherland term "sane illusions" and "healthy hallucinations," we should designate as *mere errors or deceptions of sense*. As long as the judgment retains the

power of correcting the false impressions made through the sensuous organs upon the brain, the notices thus conveyed to the mind cannot, in scientific phrasology, be called either "illusions," "delusions," or "hallucinations;" but they become so when they are extravagant and unreasonable in their character, and the judgment ceases to operate in rectifying the false ideas, and the conduct of the individual is evidently influenced by them. This we feel assured to be the only safe principle to guide us in the use of these important medical terms, particularly when giving evidence in courts of judicature. It is an abuse of language to call the incidental and transient deceptions of any of the senses, either illusions, delusions, or hallucinations, or symptoms of insanity.

Esquirol says, "Illusions are not rare in a state of health, *but reason dissipates them*. A square tower, seen from a distance, appears round; but if we approach it, the error is rectified. When we travel among the mountains, we often take them for clouds. Attention corrects this error. To one in a boat the shore appears to move. Reflection immediately corrects this illusion. *Hypochondriacs have illusions which spring from internal sensations. These persons deceive themselves, and have illusions respecting the intensity of their sensations and the danger of losing their life; but they never attribute their misfortunes to causes that are repugnant to reason. They always exercise sound reason, unless Lypemania (melancholy) is complicated with hypochondriasis.*" If this great man had seen Buranelli, could he have given a more accurate description of his case than that contained in the latter part of the preceding quotation? Did not Buranelli attribute his misfortunes "to causes repugnant to reason," when he stoutly maintained in opposition to repeated attempts to prove the absurdity of his impression, that his "bed swam with water?" Again, when he persisted in asserting that his kind physician, Dr. Baller, had endeavoured to poison, and in fact had murdered him, and was the origin of all his misfortunes, did he not, in the words of Esquirol, trace his imagined ailment "to causes repugnant to reason?" There was no foundation for his delusion respecting the bed, and there was not the most remote justification for his delusive impressions respecting Dr. Baller. Admitting this, and we cannot see how it can be denied, then Buranelli, according to the doctrine enunciated by Esquirol, was unequivocally insane. If Dr. Sutherland rightly described the case of Buranelli as one of hypochondriasis, was not melancholy complicated with it, and did he "exercise sound reason?" There can only be one answer to these questions. Buranelli's case was, indisputably, one of suicidal melancholia with delusions. It was also apparent to all who had anything to do with him, that he was totally incompetent to the "exercise

of sound reason" on any matter connected with the state of his physical health, or in relation to the circumstances surrounding him. Adopting as our standard Esquirol's view of the point in dispute, Dr. Sutherland committed a grave error when he termed Buranelli's impressions the "*illusions of hypochondriasis*," instead of the "*delusions of insanity*;" for, according to the great French authority, *these apparently false impressions of the senses, commonly called "illusions," cease to be such "when they are associated with melancholia, and sound reason ceases to exercise its influence over the patient."* But apart entirely from a psychological consideration of the point, we affirm that no medico-legal witness is justified in attempting to draw such refined and subtle distinctions, when giving evidence in cases of criminal insanity. In a court of justice the terms "illusion" and "delusion" should always be used synonymously, and the greatest caution should be exercised not to mislead and confuse the jury by the use of pedantic phraseology, or by attempting to draw, whilst in the witness box, precise psychological distinctions between words conveying a recognised popular signification. We think Dr. Sutherland is fairly open to criticism on this point. For illustration, he was asked the following questions:—

Q. Is not the idea of the bed being swamped with water a *delusion*? A. An *illusion*.

Q. What is the difference? A. An *illusion* is *objective*.

Q. Is a *delusion* *subjective*? A. It may be, but the judgment must be involved.

In addressing students from the academic chair, the terms "*objective* illusions" and "*subjective* delusions" may be admissible and in good taste; but they are entirely out of character and unjustifiable in a court of justice. Apart altogether from this view of the matter, we would ask Dr. Sutherland if *illusions* as well as *delusions*, using these terms to describe symptoms of insanity, are not often "*subjective*" as well as "*objective*" in their origin? How often do we see cases of palpable insanity arising from what Dr. Sutherland designates as "*objective*" influences, or causes affecting the organism, deranging the general health and brain, and disordering the manifestations of the mind?

Having freely criticised the evidence of the two principal physicians who appeared as witnesses in behalf of the prosecution, we consider this a favourable opportunity for the consideration of the important question whether, under circumstances analogous to those previously detailed, professional and scientific men are justified at all in giving evidence; whether by so doing they are not arrogating to themselves an amount of knowledge of the human mind, and sagacity in detecting its delicate aberrations, unattainable by finite intelligences. Was not the position of

the medical witnesses who opposed the plea of insanity in the case of Buranelli, after a grave question had been raised as to his state of mind, a very questionable, if not a false and dangerous one? It may be urged that evidence of this character is often admitted in our courts of law in civil cases. Such is undoubtedly the fact. A medical expert may speak with some confidence upon questions of disputed testamentary capacity, basing his opinion upon facts deposed to by others. If he draws a wrong conclusion from acknowledged data, the mischief that ensues is not great or necessarily irremediable; but in a criminal case, when the life of a fellow-creature is dependent upon the medical testimony, when an unguardedly-expressed opinion, a false conclusion, an erroneous inference, may consign a person but ill-prepared to meet his God to a painful and humiliating death, how frightfully hazardous and fearfully perilous—how awfully responsible is the position of the medical witness! How can he, without being endowed with the attributes of DEITY, speak authoritatively and positively as to the state of mind alleged to have existed some months previously, of which he could have no personal or practical knowledge? The witness who by his evidence *supports*, under the circumstances assumed, the plea of insanity, is in an essentially different position. If a *prima facie* case of mental derangement be established in favour of an accused person, the testimony of a scientific expert, although necessarily speculative, is legitimate and admissible. His object is to save human life, by affording the prisoner the benefit of any doubt that may have been raised as to his sanity and responsibility when the overt act of crime was committed. The witness may, with the best intentions, come to a rash and unjustifiable conclusion, and if such should be the case, no serious injury to society ensues if, as the result of his evidence, a fellow-creature is rescued from the hands of the public executioner. On the other hand, if in a criminal case a medical witness incautiously or inadvertently gives a wrong opinion, a monstrous act of injustice and cruelty may be perpetrated, *for which there can be no remedy*. A scientific witness has no right, if called upon, to give such evidence, from the conviction that he cannot do so without recklessly trifling with human life. It is utterly out of the power of any human being, whatever may be the extent of his experience, the amount of his acquirements, and the degree of his sagacity, to depose to the *sanity* of a person under circumstances similar to that of Buranelli's, without having had an opportunity, at the time of the commission of the alleged criminal act, of testing his mind. If there had existed no facts in connexion with the case to excite suspicion or raise a doubt of his sanity, the medical witness would, in our opinion, be guilty of an act of bold presumption if he were to swear that any man who committed a crime some months previously was mentally sound

and responsible at the moment. When we consider how suddenly symptoms of homicidal insanity develop themselves, how transient and evanescent these attacks are, that a man may be wildly delirious and irresponsible in the morning, and sane, rational, and responsible in the afternoon, how can a medical witness speak with satisfaction on the subject? If we were asked, if Rush and the Mannings were of perfectly sane mind when they committed the brutal murders for which they justly suffered the extreme penalty of the law, we should certainly decline committing ourselves to an opinion, *if* the lives of these miserable criminals rested upon the answer we gave to the interrogatory. The witness may entertain an opinion, and a strong one, upon the point, but he could give no evidence *on oath* which would be at all safe or justifiable.

But how different is the position of the medico-legal witness, who enters a court of justice and swears to the sanity and responsibility of a criminal in favour of whom the plea of insanity is urged; and how grave and solemn is his responsibility *if that plea of extenuation is supported by evidence that should, if properly weighed and dispassionately considered, carry conviction to the mind*. Apply this principle to the medical witnesses whose evidence hung Buranelli. It may be urged in defence of Dr. Sutherland, that when pressed upon the point, he positively declined to give an opinion as to Buranelli's state of mind on the 7th of January. When asked, whether he thought the prisoner of sane mind when he committed the murder, he said, "*I do not like to give an opinion about that. I think that is a question for the jury to give an opinion of, not me.*" Does not this answer of Dr. Sutherland expose him to the suspicion of wishing to say something *ad captandum* to the jury? He was in the position of a Crown witness, subpœnaed for the special purpose of enlightening the jury on the very point which they were empannelled to try, and solemnly sworn to consider. The question at issue was not whether Buranelli was a sane man on the day when Drs. Sutherland and Mayo visited and examined him, *but was he so on the 7th of January?* If Dr. Sutherland refused to speak of his mental condition on that day, for what purpose did he enter the witness-box, and uselessly obstruct by his irrelevant evidence the course of justice? Instead of throwing any light upon the point which the jury had in reality to decide, instead of dissipating the cloud hanging about the subtle question before the judge, he, by the character of his evidence, mystified the court, and raised doubts where all would otherwise have been clear and beyond cavil and dispute. Dr. Sutherland certainly refused to say that Buranelli was sane and responsible on the 7th of January, but the whole *tendency* of his evidence led irre-

sistibly to the conclusion that he considered the prisoner sane and responsible on the day of the murder. If such was not his opinion, why did he battle with the strong evidence urged in favour of Buranelli's insanity, and why endeavour to persuade the jury that the clear and obvious delusion under which the prisoner had for so long a period laboured, was not a *delusion* of insanity, but the *illusion* of hypochondriasis? Surely there was no necessity for such refined distinctions? If he believed he was incompetent to give an opinion of Buranelli's condition of mind, then why not have left the point at issue entirely in the hands of the jury, and at once refused to answer the questions previously put to him? In such a position he might with perfect propriety have said, that having declined giving any opinion as to Buranelli's mental state on the 7th of January, from the belief that the question was one for the consideration of the jury, and not for himself, he must respectfully decline to reply to any other interrogatories having an *indirect* bearing upon the prisoner's condition of mind when he committed the crime. Such an answer would have harmonized with the reply to which we have alluded, and there would have been some consistency in his conduct; but instead of taking this course, he, by his replies, did his utmost to knock from under the unhappy culprit the only prop that supported him, and to divide the fragile cord upon which his life was suspended. It would have been well for the poor miserable wretch who has gone to his last account, if the medical witnesses who appeared for the Crown had left the matter entirely to the consideration of the jury; but, in the face of their strongly expressed opinion, could any other verdict have been returned? Dr. Sutherland was asked, whether he had heard detailed by the witnesses the acts and aberrations attributed to the prisoner, and which were considered as indicative of his mental state; and assuming them *to be true*, would he refer them to unsoundness of mind? What was Dr. Sutherland's answer? Did he say, "I cannot, with any satisfaction to my mind, give a reply to the question; I must leave that point in the hands of the jury. I cannot, without being endowed with superhuman powers of penetration, say 'yes' or 'no' to the interrogatory?" If such a rejoinder had been made, it would have been in unison with his emphatic refusal to give any opinion on the subject. What was his answer? "*No; I cannot consider the acts to have been the result of motiveless impulse.*" It would appear, from Dr. Sutherland's answer, that he entertained an opinion, and a very *strong* one, of Buranelli's state; and we must confess that he travelled out of the record to give the precise kind of reply likely to forcibly impress the jury with an idea of Buranelli's sanity on the fatal day. Was it necessary

for Dr. Sutherland to refer at all to the act not being a "*motiveless one*"? That profoundly subtle point had not been mooted during the trial, but Dr. Sutherland *volunteers* a statement in reference to it. *Cui bono*? Did he do so with the view of benefiting the unhappy prisoner?—was it for the purpose of removing any doubts that might exist in the mind of the jury?—or did he benevolently wish to enlighten the Judge?

Dr. Sutherland having abdicated his functions as a witness by admitting that he was not competent to throw any light upon the question in reality before the court, it occurs to us that there was only one course for him to pursue, and that was to retire altogether from the case.

With these remarks we conclude our criticism of the medico-legal testimony adduced against the plea of insanity advanced in favour of Buranelli, as well as the detail of facts illustrative of his state of mind for some time antecedent to the murder of Mr. Lambert. We will shortly recapitulate the evidence which, according to our judgment, is demonstrative of Buranelli's mental derangement and moral irresponsibility:—

1. THE SUDDEN AND GREAT ALTERATION OF CHARACTER FOLLOWING THE DEATH OF HIS WIFE, AND SUCCEEDED BY
2. GREAT DEPRESSION OF SPIRITS; FONDNESS OF SOLITUDE; IRRITABILITY OF TEMPER; VIOLENCE OF LANGUAGE; MENTAL STATES ENTIRELY OPPOSED TO HIS NATURAL AND PREVIOUSLY MANIFESTED CHARACTER.
3. HIS SUICIDAL FEELING AND PROPENSITY, VIEWED IN ASSOCIATION WITH HIS ACUTE MELANCHOLIA. HIS HAVING ASKED A PERSON TO SHOOT HIM. HIS SEVERAL ATTEMPTS AT SUICIDE.
4. HIS DELUSIONS RESPECTING DR. BALLER, OF PENS-HURST, WHO HAD TREATED HIM WITH GREAT SKILL AND KINDNESS. THE DELUSIONS CONSISTING IN A FIRM BELIEF THAT DR. BALLER HAD ATTEMPTED TO POISON HIM; HAD TREATED HIM WITH GREAT CRUELTY; HAD LACERATED HIS FLESH, AND, IN FACT, MURDERED HIM! HIS DESIRE TO MURDER DR. BALLER, UNDER THE INFLUENCE OF THESE DELUSIONS.
5. HIS DELUSION THAT MR. LAMBERT WAS, TO A CERTAIN EXTENT, A PARTICEPS CRIMINIS IN DR. BALLER'S ALLEGED CRUELITIES.

6. HIS INSANE DEPARTMENT AND PHYSIOGNOMY WHEN ADMITTED INTO MIDDLESEX HOSPITAL, UNDER THE CARE OF MESSRS. SHAW AND HENRY.
7. HIS DELUSIONS RESPECTING HIS BED, AND THE CONDITION OF AN OLD WOUND. HIS BELIEF THAT HIS BED "SWAM WITH WATER." HIS PERSISTENCE IN THIS ASSERTION IN OPPOSITION TO REPEATED ATTEMPTS TO PROVE THE UTTER GROUNDLESSNESS OF HIS IMPRESSIONS. HIS DELUSION, VIEWED IN COMBINATION WITH HIS GENERAL APPEARANCE, WHICH CONVEYED TO ALL THE NURSES AND OFFICIALS OF THE HOSPITAL THE STRONG BELIEF THAT HE WAS NOT IN HIS "RIGHT MIND."
8. THE CHARACTER OF THE LETTERS AND MEMORANDA FOUND IN HIS POSSESSION, THEY BEING PRIMÂ FACIE EVIDENCE OF INCOHERENCE AND INSANITY.
9. THE CRIME ITSELF. THE INADEQUACY OF THE MOTIVE LEADING TO ITS COMMISSION. THE ASSOCIATION OF MR. LAMBERT WITH THE DELUSION RESPECTING DR. BALLER.
10. THE ATTEMPT AT SUICIDE AFTER THE ACT OF HOMICIDE. SUICIDAL AND HOMICIDAL INSANITY GENERALLY BEING ASSOCIATED WITH, AND RESULTING FROM, THE SAME MORBID STATE OF BRAIN AND MIND.

In concluding these cursory comments on the case of Buranelli, we cannot refrain from expressing a sincere hope that we have in the preceding pages placed upon record the particulars of the trial and execution of the last lunatic that will suffer death upon the gallows. Such a barbarous proceeding can do no good, but, on the contrary, much mischief to the best interests of society, and is perfectly valueless when viewed as a means of preventing crime,—the only valid and reasonable excuse that can, with any semblance of justice, be assigned for the act. When speaking of the irresponsibility of the insane, and the object of punishment, the great Lord Coke says, "the execution of an offender is for an example, *ut pœna ad paucos, metus ad omnes perveniat*;" and that justly eminent jurist adds, "but so it is not when a madman is executed, but should be a miserable spectacle against law, and of extreme inhumanity and cruelty, *and can be no example to others*."*

We are aware that an opinion is current in certain quarters,

* Coke, Inst. 6.

among some distinguished advocates and physicians, that insanity, even if clearly established, should not exempt a criminal from the extreme penalty of the law. We do not for one moment believe that so unchristian and monstrous a doctrine is tolerated by the more enlightened members of the legal and medical professions. There are undoubtedly among both bodies, men who entertain extreme and ultra views respecting crime and punishment,—men not deficient in natural sagacity and not uninfluenced by feelings of humanity, who, being educated in the spirit and prejudices of the old school, consider the Throne, the Seat of Justice, and the State in danger if any undue mercy is exhibited towards those who violate the sacred majesty of the law !

Not hang a lunatic, they exclaim, who has committed the crime of murder ! Not hand over to the tender mercies of the public executioner an insane person who has imbued his hands in the blood of a fellow creature ! If doctrines like these are promulgated,—if such principles are allowed to interfere with the legitimate administration of justice, who will answer for the safety of society, the security of the state, or the life of the sovereign ? Thank God we have the happiness of living in an age when such obsolete doctrines can exercise no influence upon the understanding, the humanity, character, and conduct of those placed in positions of great legal trust and responsibility. Futile arguments and vain threats like these were, in more cruel and barbarous epochs, urged in defence of the rack, the thumb-screw, and other benevolent modes of prolonging human suffering. When Sir Samuel Romilly proposed the abolition of the punishment of death for stealing a pocket-handkerchief, the Commons of England consulted the Recorder and the Common Sergeant, who assured the House that such an innovation would endanger the whole criminal law of England ; and when the same excellent man afterwards proposed to abolish the disgusting and disgraceful punishment for high treason, the Attorney-General of the day said, “ Are the safeguards, the ancient landmarks, the bulwarks of the constitution, to be thus hastily removed ? ” It was in consequence of this singularly ludicrous manifestation of fear that Mr. Ponsonby was induced indignantly to exclaim, “ *What ! to throw the bowels of an offender into his face one of the safeguards of the British constitution ?* ” In the spirit of Mr. Ponsonby, we ask, is it necessary for the vindication of justice,—is it essential for the safety of the statute-book,—is it required for the maintenance of the law and the dignity of those delegated with its administration, that a “ miserable spectacle,” like the execution of Buranelli, with all its associated horrors, attendant and unmitigated evils, should again occur in a civilized and Christian land ? God forbid that another opportunity

should be afforded of witnessing so repulsive and disgusting a scene as that which accompanied the cruel death of this miserable lunatic. It spoke well for the humanity of the mob who at an early hour had congregated at the foot of the gallows, when they gave unmistakable utterance to their feelings of deep execration, horror, and disgust at the sufferings of the unhappy man. Can a more terrible image be conjured to the imagination than that of a public executioner, who, in consequence of his inexpertness in the adjustment of the rope, found it necessary during the convulsive struggles that ensued to hang by the legs of a criminal lunatic, for the purpose of expediting his death! Out of evil, we pray to God that good may arise.

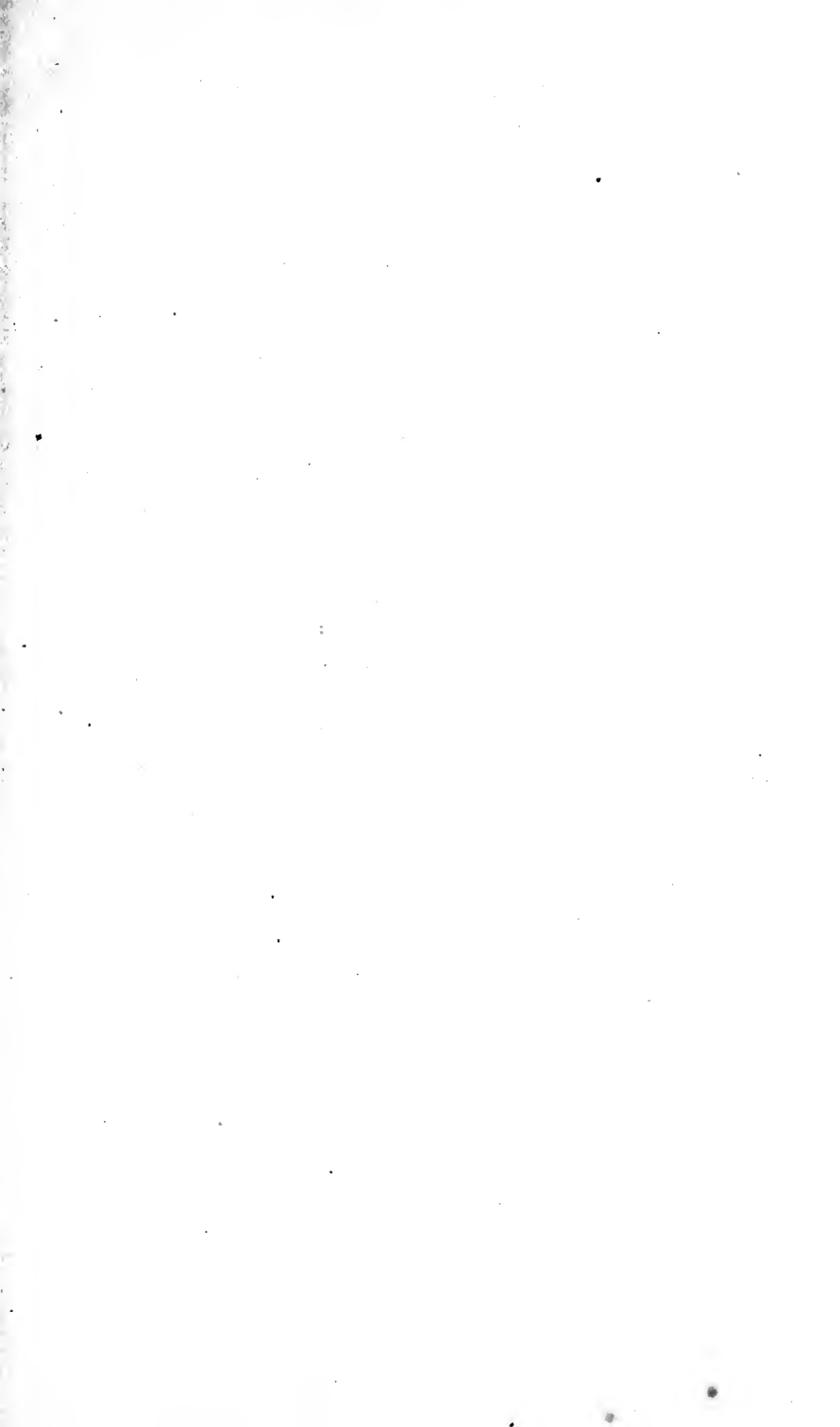
The execution of Buranelli, in the teeth of a strong protest, made a few days before his death, and in opposition to facts which, if they did not conclusively demonstrate his lunacy to the satisfaction of the Judge and the jury, undoubtedly involved the matter in grave doubt and difficulty, establishing beyond all dispute a strong *primâ facie* case in favour of his insanity and irresponsibility, is a matter, as we have previously observed, deeply to be regretted and sadly to be deplored. May the INTELLIGENCE, the HUMANITY, the SCIENCE, the CIVILIZATION, the JUSTICE, and the CHRISTIANITY of this great and justly renowned country never again be sullied or outraged by a repetition of so revolting an exhibition!

It would appear, from a paragraph which has been industriously circulated in the columns of the daily press, that after Buranelli's execution, one of the officials of St. Luke's Hospital performed a *post mortem* examination of his brain. It is alleged that no disease was detected! What did the pathologist expect to discover? What does the alleged absence of organic alteration establish? Does it prove Buranelli's mental soundness on the 7th of January? No man, with any pretensions to scientific knowledge, would gravely countenance such an absurdity. For what purpose was the examination made? Was it to satisfy the Judge, to remove all doubt from the mind of the jury, or to act as a kind of salvo to the consciences of the medical men who swore to Buranelli's mental soundness? If the *post mortem* investigation was made with any such *bonâ fide* intentions, why was not the compliment paid to Mr. Shaw and Mr. Henry of asking them to be present? They were deeply concerned and interested in the case, having had Buranelli for some time under their joint care in Middlesex Hospital, and in common courtesy they ought to have assisted at the examination after death. We make these remarks without for one moment wishing to convey the impression that we entertain the opinion that the inspection was not properly and scientifically made, and the result accurately reported. We also hear that Drs. Mayo and Sutherland carefully measured, after death, Buranelli's skull! *Cui bono?*

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